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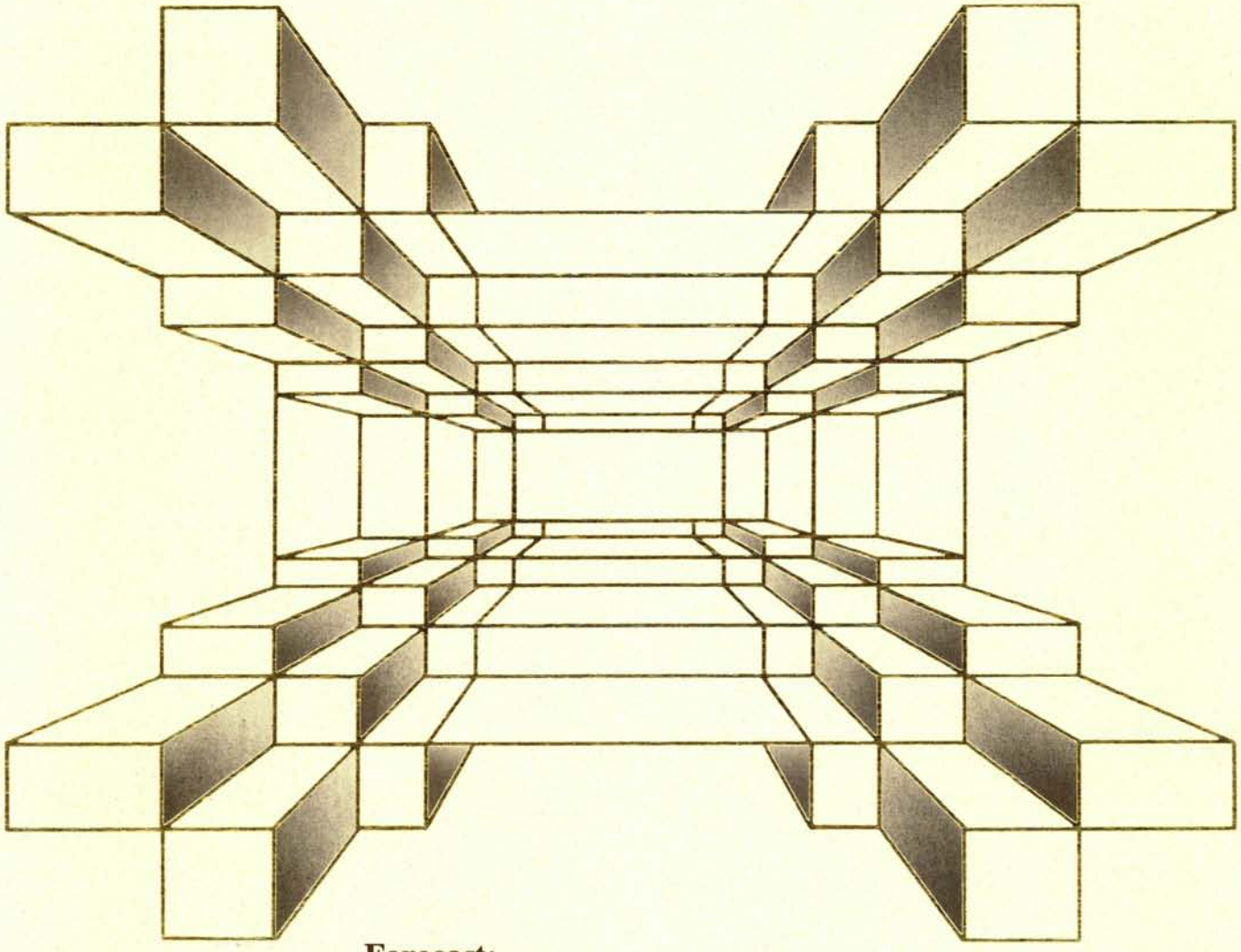
BUSINESS OUTLOOK

FOR WEST MICHIGAN



Forecast:

- Jump in Final Sales Leaves West Michigan Flat-Footed

Feature Article:

- Improving Access to Health Care: What Can Michigan Do?

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BUSINESS OUTLOOK FOR WEST MICHIGAN

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The BUSINESS OUTLOOK
DISCUSSION PAPER

Improving Access to Health Care: What Can Michigan Do?

Stephen A. Woodbury and Andrew J. Hogan[1]

In the Spring of 1987, Governor James Blanchard appointed a Task Force on Access to Health Care, made up of representatives of business, labor, the health-care industry, and government. The mandate of this Task Force was twofold:

(1) to investigate the extent to which Michigan residents receive inadequate health care because they lack either health insurance or sufficient income; and

(2) to develop a set of recommendations for policies to address any problems found.

After deliberating for about a year, the Task Force decided in the Fall of 1988 to assemble a group of advisors from universities in Michigan. This group, which came to be known as the Academic Consortium, attempted to provide information and analysis to the Task Force in as unbiased a manner as possible. In particular, the Academic Consortium, of which we were members, presented a menu of policies that the State of Michigan might adopt to address the problem of access to health care, as well as the costs and expected results (both intended and unintended) of the proposed policies.[2]

Our goal in this article is to provide our perspective of the problems facing the health-care system in Michigan. We first outline the nature of the perceived problem of health-care access that has come to be known as the "uninsurance problem," and show how this problem is linked to rising health-care costs. We then describe some of the options that the Task Force considered and discuss the pros and cons of each. We conclude with some thoughts on what Michigan can do to improve access to health care.

I. The Problem of Access to Health Care

What is the problem? Why did the Governor decide to form a Task Force on Access to Health Care? Why not access to ice cream cones in July or compact disk players?

The general answer is that there is something different about health care: its provision to an individual benefits not just that individual but others as well. To take an obvious example, the death or disability of a woman who is the mother of two small children would be bad not only for her. If that death or disability could be avoided through timely and appropriate medical care, there would be obvious benefits for the children, for the husband, and for society generally. In short, we all care about that woman's health.

To take another example that we'll return to later, the provision of good prenatal care can have benefits that extend far beyond the woman who receives the care. The birth of an unhealthy, underweight baby can imply a long and costly stay in a neonatal unit, complications in growth and development, and possibly a person who will be less able to contribute to society than would otherwise be the case.

So health care can be thought of as a public good. In this respect, some have argued that health care is like education. As a society, we've decided to provide 12 years of public education to all children mainly because we believe there are general social and economic benefits that come from making sure that every member of society has some basic level of schooling. Again as a society, we seem to be coming around to the same kind of view of health care; that is, to the view that we all would benefit from the provision of some basic level of health care to every member of society.

So why is there a health-care crisis now, when there wasn't a perceived problem 50 years ago? There is no sure answer here, but we think there are two factors involved.

First, it is only in recent decades that the kind of medical care that is widely available has done unambiguously more good than harm. In fact, the proliferation of wonder drugs, prostheses, surgical procedures, and other treatments that either save lives or improve the quality of life has been astonishing. But this astonishing growth of knowledge has resulted in a moral problem. Put bluntly, the timing and manner in which a person dies are now a matter of choice—social and economic choice—to a far greater degree than has ever been true before.

The other factor is that the price of gaining access to health care has risen steadily and has outpaced the increase in the

price of nearly any other good or service. Table 1 shows this. The figures are price indexes in 1965 and 1988 for health care, health insurance, and all consumption goods and services taken together. The right-most column shows that the price index for all consumption goods and services increased from about 38 to about 126, for a percentage increase of over 200 percent. The price indexes of both health care and health insurance rose by over 400 percent. In other words, compared with 1965, you now need to give up twice as much in real consumption goods and services to get a unit of health care or health insurance.[3]

Table 1
Price Indexes for Health Care, Health Insurance, and All Consumption Goods and Services
1965 and 1988
(1982=100)

	Health care	Health insurance	All consumption goods & services
1965	28.2	35.5	37.5
1988	144.5	180.4	125.9
Percentage increase	412%	408%	236%

SOURCE: U.S. National Income and Product Accounts.

So health care really has become less affordable. Why this is true is another good question. There are whole courses on this subject taught at the universities, but Exhibit 1 shows in a nutshell that there are two basic reasons for increased health-care costs.

First, the technology used to treat many conditions is far more expensive and involved than it used to be (upper-left box of Exhibit 1). This is understandable in some cases because the only known treatment is high-tech and expensive. Examples would be some of the methods of treating cancer and heart disease. But it appears that the health-care system is spending more and more to achieve smaller and smaller increases in longevity.

Also, many have argued that some medical conditions that used to be treated successfully at low cost are now treated at higher cost. For example, consider prenatal care. The infant mortality rate has fallen only modestly in the U.S. in the last decade. But today when a woman becomes pregnant, she receives many more treatments than 10 years ago. She is subjected to imaging techniques like ultrasound to determine the expected due date, and in many cases amniocentesis. We would not suggest that these procedures are without benefits. The question is whether the routine use of such procedures is the best use of society's resources.

Some have argued that the ultrasound, which costs over $400, is like the options on a new car. Options are where the car dealer makes a disproportionate share of his or her profits, but they are not essential to a safe, reliable car. Similarly, the ultrasound may not be essential to good prenatal care.[4]

What we are suggesting is that the real price of a *given quality unit* of health care is now much higher than it used to be. (That seems to be supported by Table 1, by the way.) In other words, we're paying more in real resources for health care, but not always getting a corresponding return in real benefits.

A second reason for increases in the price of health care has to do with demand (see the upper-right box of Exhibit 1). Most health care is paid for not by the person who receives the care but by a third party—typically either an employer-provided insurance plan or the government (through Medicare or Medicaid). As a result, consumers tend to be insensitive to the price they pay for health care. (It also means that the political process has seen to it that increased resources are being pumped into the health-care system through public programs like Medicare and Medicaid.)

There are two central points:

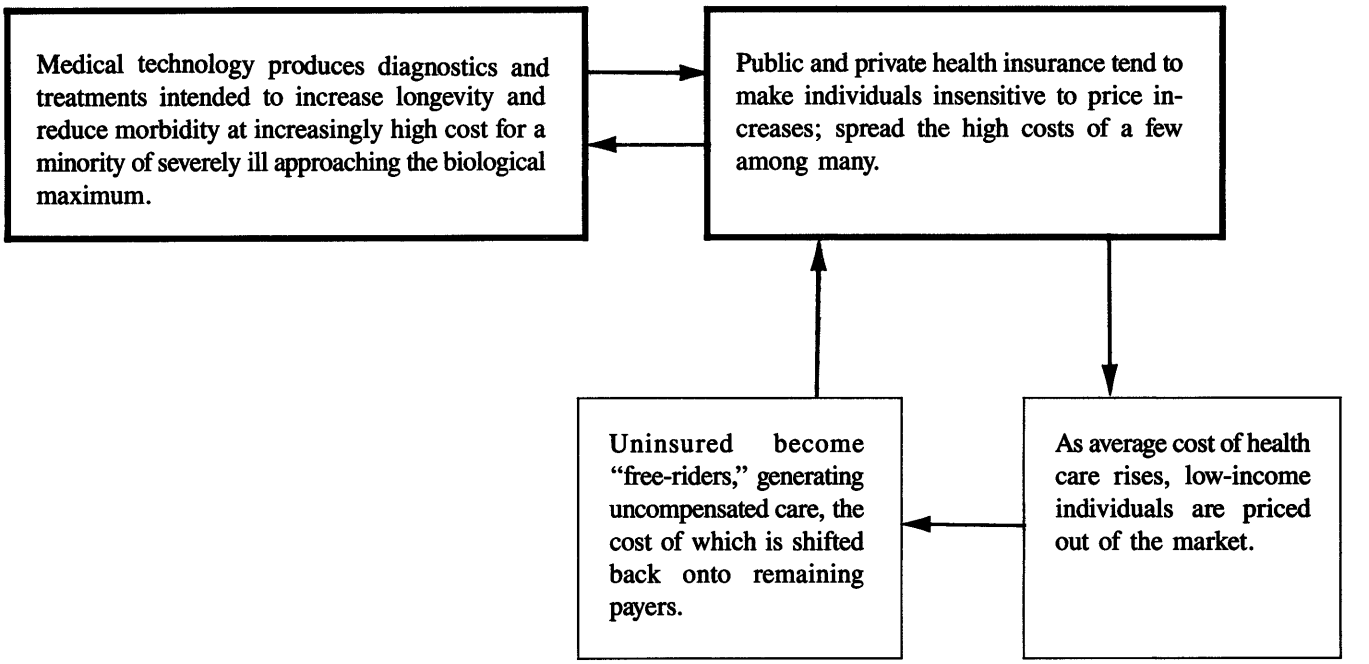
(1) Expensive medical technology and third-party payment schemes have combined to raise the price of health care dramatically.

(2) Increases in health-care costs have been so large that low-income individuals have been priced out of the health-care market. That is, in order to have access to health care, you must either be wealthy or covered by health insurance.

In addition, hospitals and physicians who give medical care to uninsured patients usually are not compensated. The costs of "uncompensated care" are in turn passed along to those who are insured (and to the employers and governments who insure them). The lower two boxes of Exhibit 1 show how low-income individuals are priced out of the health-care market, and how the inability of these individuals to pay for health care results in uncompensated care, which in turn increases health costs for those who are insured.

There is one additional point on health-care cost inflation. The rapid increases in the price of health care have led to a response by the third-party payers: cost containment. As employers and the government have seen their costs go through the ceiling, they have tried to restrict the provision of certain treatments. This is what economists call *rationing* by nonprice means. But rationing is unpopular—think back to what happened when federal officials started talking about rationing gasoline back in the mid-1970s. So we've come up with the euphemism "cost containment." (Everyone wants costs to go up more slowly, don't they?)

Exhibit 1
Cost Inflation in the U.S. Health-Care Systems



How many residents of Michigan are not covered by any form of health insurance? Table 2 provides some answers. The bottom row of the table, labeled "Total," shows that about 860 thousand of the nearly 9 million residents of Michigan were not covered by any form of health insurance in March 1988. That is, the so-called uninsurance rate for the total Michigan population was between 9 and 10 percent. Notice that the uninsurance rate differs from group to group within the Michigan population. Children aged 0 to 14 had a higher uninsurance rate than the Michigan population generally—between 13 and 14 percent. Nonwhites and the poor had even higher rates of uninsurance—15 percent for nonwhites, and 17 to 25 percent for the near-poor and poor.

II. Options for Dealing with the Uninsurance Problem

The Governor's Task Force, charged with recommending ways of dealing with the problem of uninsurance, focused on three approaches to improving access to health care in Michigan: (1) establishing a universal health insurance plan managed by the State of Michigan and financed out of tax revenues; (2) mandating employers to provide health insurance for their workers, and covering any remaining uninsured individuals under a state-managed public program; and (3) increasing health insurance coverage through one or more of three voluntary plans.

A. Universal Health Insurance

The universal health insurance proposal has had the greatest appeal for the members of the Task Force, although we hasten to add that there are problems with the plan that make it unlikely it will ever be adopted.

The universal plan would cover all Michigan residents under a comprehensive benefit plan administered by the State of Michigan. Because Michigan would be the sole payer of benefits, it would presumably be able to negotiate favorable and reasonable fee schedules with the various health-care providers in the state. The state would also negotiate "delivery targets"—kinds and quantities of health care to be provided—with providers. The benefits would be financed through an increase in the state income tax, which would need to more than double.[5] Employers would no longer be the providers of health insurance, and no private company would be permitted to offer health insurance that overlapped that provided by the state.

The appeal of this program is threefold: First, it is comprehensive—everyone is covered. Second, many believe that it has the ability to contain costs because of the single payer.[6] And third, it could lead to gains in administrative efficiency because of its simplicity compared with the current hodgepodge of payers.

Table 2
Uninsurance Rates by
Selected Category, Michigan 1988

Category	Uninsurance rate	
Full-time workers	7.2%	226,856
		3,147,209
Part-time workers	9.2%	87,572
		951,321
Persons aged 0 through 14	13.6%	248,761
		1,835,079
Persons aged 15 through 19	6.4%	44,667
		701,195
Persons over age 65	0.28%	2,766
		973,083
Nonwhites	15.0%	209,385
		1,396,412
Persons below the poverty line	24.3%	285,194
		1,172,874
"Near poor" persons (100–150 percent of poverty income)	17.1%	132,655
		755,551
Total	9.6%	863,967
		8,950,659

SOURCE: Authors' tabulations from the March 1988 *Current Population Survey.*

The biggest single problem with the plan is that it could not be implemented at the state level without Michigan residents paying an additional $1 billion to $2 billion in taxes to the federal government. The reason is simple: currently, employers insure most workers, and workers pay no taxes on the contributions made by their employers to their health insurance. Under the universal plan, we would expect that workers would receive higher wages to compensate them for the loss of employer-provided benefits. Some of these wage increases would be taxed away by the state to pay for the universal plan, but these wage increases would also be taxable income under the federal income tax. The result would be an estimated drain of over $1 billion out of Michigan to the federal government.[7]

For this reason alone, it seems highly unlikely that Michigan could go it alone and try to provide its own state version of national health insurance. (It does seem, by the way, that momentum is building for national health insurance, but that's another story.)

B. Mandated Benefits Plus Public Program

The mandated benefits program is modeled after plans that already exist in Hawaii and Massachusetts. (The Massachusetts plan was pushed through the Massachusetts legislature during Michael Dukakis' 1988 presidential campaign.) What it would do is require all employers either to provide their employees with a specified health insurance package, or to pay a tax that would go toward covering the cost of a public plan that would cover anyone not insured under an employer-provided plan.

Specifically, the proposal considered by the Task Force has four features:

a. It would require any employer who did not pay at least 80 percent of an employee's health insurance premium to pay a payroll tax of 10 percent on the first $20,000 of that employee's earnings. This is known as the "play or pay" approach to mandating.

b. It would require that the insurance provided be "qualified," that is, meet some set of criteria. Those criteria would include dependent coverage (though a spouse would not need to be covered if he or she had coverage under another employer's plan).

c. No employer would be exempted from the tax, but there would be an exemption for young workers. Specifically, children under 18 who work and college students who work would not be covered independently (the idea is that they should be covered by a parent's plan). Note that there is no exemption for part-time workers.

d. A public state-run program would provide health insurance to all those not covered by employment-related plans. The best estimate is that the public program would cover 1,200,000 individuals at a total cost of around $1 billion.

The funding for this program would come from several sources. About $350 million would be generated by the payroll tax, and about $80 million would come from a tax on individuals enrolled in the public program (the tax would depend on the income of the individual). There would be further offsets because some funding would come out of monies currently used to finance Medicaid. But there would still be a need for an infusion of new funds, and these would have to come out of general revenues.

The appeal of this proposal is that it is comprehensive—everyone would end up being covered. But the main drawback of the proposal—and the reason it has not been favored by the Task Force—is that it contains no inherent cost-containment mechanism. The Task Force clearly sees cost

Exhibit 2
Options Considered by the Governor's Task Force on Access to Health Care

Proposal	Pros	Cons
1. Universal health insurance[1]	Universal access Potential for cost control	Major tax increase Limited choice Bureaucracy
2. Mandated benefits plus public program[2]	Incremental change Provider choice and diversity Improved access	Some new taxes Less potential for cost control Possible impact on business cost
3. Voluntary programs	Lowest cost Target most needy	Minor impact on access
a. Small employer insurance pool[3]	Local initiative used	Local solution only
b. Medicaid buy-in[4]	Easy to implement	Welfare stigma

1. D.U. Himmelstein, Stephanie Woodhandler, et al. 1989. "A National Health Program for the United States: A Physicians' Proposal." *New England Journal of Medicine* 320(2): 102–108 (Jan. 12).
2. Arthur Mazer, et al. 1988. Massachusetts Health Security Program. S.426 (Commonwealth of Massachusetts).
3. Alpha Center. 1986. Health Care for the Uninsured Program Quarterly Report. Washington, D.C., 1:1–4, December.
4. K. E. Thorpe, J.E. Siegel, and Theresa Daily. 1989. "Including the Poor: The Fiscal Impacts of Medicaid Expansion." *Journal of the American Medical Association* 261(7): 1003–1007.

containment as an essential component of any program to improve access to health care in Michigan, and that means mandated health benefits are unlikely to be adopted.

C. Voluntary Programs

Finally, a variety of programs could be implemented that might improve access to health care for specified groups of uninsured individuals. Such programs would be voluntary, in the sense that they would simply make it less expensive for certain groups of uninsured workers to buy insurance for themselves or their children, or they would make it less expensive for employers to provide health insurance for their workers if they so desired. There are three programs of this kind—that is, voluntary programs—that were considered by the Task Force.

1. *Small Employer Insurance Pool.* The first proposal is to create a small employer health insurance pool, which would be open to all businesses with fewer than 25 employees and new businesses (businesses less than two years old) with fewer than 100 employees. The Insurance Bureau of Michigan would determine actuarially fair premiums and administrative loadings. The rates charged should be lower than the rates now available to small employers because of scale economies that could be attained by creating a pool. As long as an employer's total health insurance expenses were less than 4 percent of payroll, the employer would pay the full premium. If an employer's health insurance expenses exceeded 4 percent of payroll, the employer would pay half of the premium in excess of 4 percent, and the state would pay the other half in excess of 4 percent. As a result, small employers would be subsidized for providing their workers with health insurance.

An important problem with this idea is that the most optimistic estimates suggest that only about one-quarter of those employers who do not now provide insurance would participate and become insurance providers. Also, as health-care costs escalate, there is no ceiling on the amount of subsidy the state could end up paying. The lack of a cost-containment mechanism in this proposal is an important drawback.

2. *Medicaid Buy-In for Children.* The second voluntary program is intended to reduce the ranks of the roughly 250,000 uninsured children in Michigan. The idea is for the state to offer a modest children's benefit package to families in which one or both parents are employed by a small employer, unemployed, or not in the labor force. The package would be modeled after Medicaid, with some copayments and deductibles, and would cost about $26 per month (if infants were excluded).

There are two problems with the Medicaid Buy-In for Children. First, it would probably have a low participation rate and not result in much reduction in uninsurance among children. Second, it could create an incentive for small employers who *do* currently provide health insurance to drop coverage of their employees, since they could now gain coverage under the Medicaid Buy-In.

3. *Medicaid Buy-In for Adults.* The third voluntary program is intended to reduce the rate of uninsurance among adults who are unemployed or not in the labor force. Unsubsidized

packages along the lines of Medicaid could be offered to these individuals for about $70 to $80 per month, and subsidy schedules have been proposed that would result in adults in poor families paying only some portion of that amount (for example, those at the poverty level would pay none of the premium, those at 200 percent of the poverty level would pay all of the premium).

We have estimated that about 100,000 individuals would be eligible for the unemployed worker plan, and about 200,000 for the not-in-the-labor-force program. We have also estimated the total cost of a Medicaid Buy-In for Adults at about $10 million, which would be financed out of general revenues.

The problem with the Medicaid Buy-In for Adults is again that it would leave holes in the system—many would still be uninsured.

III. What Can Michigan Do?

We are back to the question that faced the Governor's Task Force and that is part of the title of our paper: What can Michigan do about the current crisis in the health-care system? In its Final Report, the Task Force recommended the following:

(1) Adopt a comprehensive, affordable health-care system with universal access; such a system should be undertaken either by the federal government or jointly by the state and the federal government;

(2) Adopt immediate steps to improve access to health care for children and low-wage workers;[8]

(3) Develop a community education program that would help develop consensus for health system reform; and

(4) Allow an additional 18 months for the Task Force to explore further how a universal system might be fashioned.

The universal state-managed health insurance plan had great appeal to the Task Force because the Task Force came to view its mandate as twofold: Extend access to health care to all Michigan residents, and contain the costs of the system. Employer-mandating with a public program fails the second criterion because it has no cost-containment mechanism. The voluntary programs fail because they promise only a relatively small decrease in the rate of uninsurance.

But the Task Force was also faced with economic and political reality: The universal state-managed health plan would be extremely expensive, almost doubling the size of the state budget. Further, under current federal tax policy, a universal plan would involve the loss of at least $1 billion by Michigan taxpayers to the federal government because currently untaxed health benefits would be transformed into taxable income. In short, the Task Force realized that Michigan can ill afford to go it alone and be the first state to offer universal health insurance.

NOTES

1. Woodbury is a Senior Economist at the W. E. Upjohn Institute for Employment Research, and an Associate Professor of Economics at Michigan State University; Hogan is an Associate Professor in the Office of Medical Education Research and Development, Michigan State University, and Acting Executive Director of the Michigan Health Benefits Network. The authors are grateful to Douglas Bettinger, Eric Chua, Ellen Maloney, and Claire Vogelsong for assistance in preparing this paper. The views expressed are those of the authors and do not necessarily reflect the views of the organizations with which they are affiliated, the Governor's Task Force on Access to Health Care, or the Academic Consortium that advised the Task Force.

2. The W.E. Upjohn Institute plans to publish revised and extended versions of the studies prepared by members of the Academic Consortium in a volume edited by S. E. Berki, John Goddeeris, and Andrew Hogan, *Improving Access to Health Care: What Can the States Do?*

3. Some would argue that the quality of the product has increased significantly, but others have questioned whether pouring more resources into each unit of health care has resulted in improved outcomes. Expected lifetimes have not increased in the last 20 years. And a well-known physician and psychologist have argued forcefully that "Medical treatments, especially the drug and surgical treatments of sick individuals, have had relatively little to do with the better health that people in Western societies enjoy." They attribute the increases in longevity of the nineteenth and twentieth centuries to "advances in agriculture, . . . purification of water, improved sewage disposal, and better food hygiene." See chapter 1 of Robert Ornstein and David Sobel, *The Healing Brain* (New York: Simon and Schuster, 1987).

4. The practice of "defensive medicine"—that is, the use of unnecessary diagnostics by physicians in order to avoid malpractice suits—has also contributed to increasing health-care costs. Major changes in tort liability law will need to occur if this problem is to be stemmed.

5. The universal health insurance plan would be very expensive: the best estimate is about $9.5 billion annually. For the sake of comparison, the total budget of the State of Michigan is now about $8 billion.

6. It is also possible, however, that the state-level administration that would act as the regulator might be co-opted by the health-care industry, negating any positive impact of the universal, single-payer plan on cost control.

7. This estimate takes account of the fact that itemizers could deduct increases in taxes paid to the state on their federal returns.

8. Governor Blanchard has anticipated this recommendation in his "Healthy Start" program. He has also proposed a form of the small employer insurance pool.

The BUSINESS OUTLOOK for WEST MICHIGAN

Jump in Final Sales Leaves West Michigan Flat-Footed

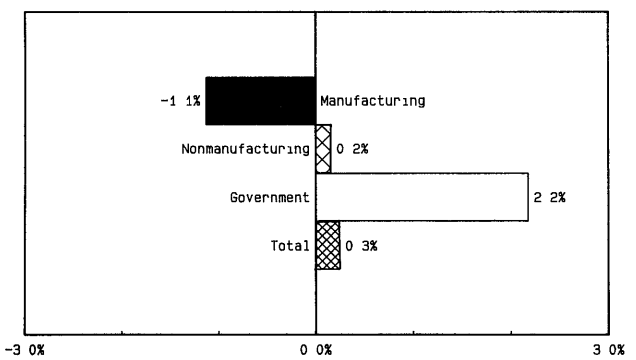
George A. Erickcek

Total employment fell 0.2 percent during the first quarter of 1990 in the five metropolitan areas of West Michigan. The decline was caused by a 1.2 percent employment decline in the region's large manufacturing sector. Employment in manufacturing should grow in the coming months, and employment in the region's nonmanufacturing sector should continue to grow, although at a modest pace.

The National Setting

The Gross National Product (GNP) grew at a modest 1.3 percent annual rate in the first quarter of 1990, slightly above its 1.1 percent annual rate recorded in the last quarter of 1989. These numbers do not portray the true strength of the nation's economy, however, because of a sharp reduction in business inventories. Business inventories actually fell at an annual rate of $5.9 billion (in 1982 dollars) in the first quarter. Final sales (GNP minus changes in inventories) rose at a robust annual rate of 4.1 percent in the quarter, far above its 1.1 percent rise in the previous quarter. The need to build back inventories alone promises a strong second quarter.

Chart 1
United States Employment
Percentage Change, First Quarter 1990



SOURCE: Based on U.S. Department of Labor data.

Consumer spending bounced back to a 2.4 percent annual pace in the first quarter, after growing at a sluggish 0.5 percent annual rate in the previous quarter. Big-ticket items moved quickly during the quarter, as personal consumption expenditures on durable goods soared at a 15.4 percent annual rate. Expenditures on motor vehicles and parts alone climbed at a 30.7 percent annual rate in the quarter. In fact, it was the heavy traffic in the nation's auto showrooms in January and February that caused the nation's inventories to dwindle in the first quarter.

Consumer spending on nondurable goods declined at a 3.0 percent annual rate, primarily because of smaller fuel bills due to the unseasonably mild winter. Consumer expenditures for services rose at a 2.3 percent annual rate in the quarter.

Not only did consumers return to the stores, but businesses and real estate developers resumed their expansion. Fixed investment expenditures rose at a 7.6 percent annual rate in the quarter, after falling at a 4.3 percent annual rate in the previous quarter. Business firms increased their investment expenditures on buildings and equipment at annual rates of 4.7 percent and 6.8 percent, respectively. Residential construction, buoyed by unseasonable mild weather, also rose at an annual rate of 10.8 percent in the quarter.

The nation's balance of trade improved slightly during the first quarter of 1990. The nation's exports grew at a 7.7 percent annual rate, while imports rose at a slower 2.7 percent annual rate.

The quarter's economic performance would have earned an "A" if not for an unwelcome jump in consumer prices and disappointing job growth. Inflation rose at an 8.5 percent annual rate in the first quarter, the highest rate in eight years. Numerous extraneous factors have been cited as causing this increase, including a sizable jump in apparel prices in March. Most economists believe that prices will settle down in the remainder of the year, and indeed, the consumer price index grew only 0.2 percent in April, its lowest monthly rate of increase since last September. Nevertheless, the

Table 1
Michigan (Statewide) Statistics
(Adjusted for seasonal variations)

Measure	1990 first quarter	1989 fourth quarter	Percent change fourth to first	1989 first quarter	Percent change first to first
Employment:					
Manufacturing	923,620	955,570	-3.3	975,190	-5.3
Nonmanufacturing	2,320,940	2,328,860	-0.3	2,273,200	2.1
Government	633,120	633,030	0.0	623,680	1.5
Total	3,877,680	3,917,460	-1.0	3,872,070	0.1
Unemployment:					
Number unemployed	353,770	352,390	0.4	308,890	14.5
Unemployment rate	7.7	7.5	0.2	6.7	1.0
State indexes:					
Help-wanted ads:					
Detroit	n.a.	161	n.a.	186	n.a.
West Michigan (5 MSAs)	258	268	-3.7	298	-13.4
Leading indicators (statewide)	140	137	2.2	150	-6.7
State components:					
Average weekly hours	41.1	42.2	-2.6	43.7	-5.9
UI initial claims	23,971	19,307	24.2	14,619	64.0
New dwelling units[a]	55,328	44,752	23.6	44,195	25.2

SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company, help-wanted index from The Conference Board and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

Table 2
West Michigan (5 MSAs) Statistics
(Adjusted for seasonal variations)

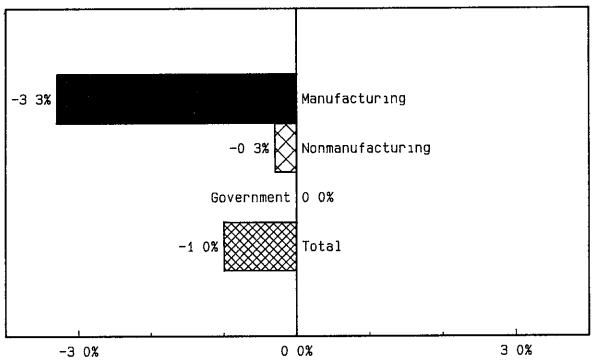
Measure	1990 first quarter	1989 fourth quarter	Percent change fourth to first	1989 first quarter	Percent change first to first
Employment:					
Manufacturing	184,960	187,250	-1.2	188,910	-2.1
Nonmanufacturing	377,880	376,670	0.3	364,510	3.7
Government	81,960	82,110	-0.2	80,420	1.9
Total	644,800	646,030	-0.2	633,840	1.7
Unemployment:					
Number unemployed	46,210	46,070	0.3	38,790	19.1
Unemployment rate	6.5	6.4	0.1	5.5	1.0
Local indexes:					
Help-wanted ads	258	268	-3.7	298	-13.4
Leading indicators	144	133	8.3	145	-0.7
Local components:					
Average weekly hours	41.1	41.4	-0.7	42.3	-2.8
UI initial claims	3,003	2,545	18.0	2,047	46.7
New dwelling units[a]	12,456	7,806	59.6	7,811	59.5

SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company, ad counts from five daily newspapers and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

broad-based GNP price deflator rose to an annualized 5.7 percent in the quarter, up from its 3.2 percent annual rate in the previous quarter.

Chart 2
Michigan Employment
Percentage Change, First Quarter 1990



SOURCES: Based on U.S. Department of Labor and Michigan Employment Security Commission data.

In April, only 69,000 new jobs were created nationwide, and unemployment rose 0.2 percentage points to 5.4 percent. In fact, private payrolls actually declined in the month, but this was offset by the federal government hiring 79,000 part-time census workers. Employment in manufacturing has declined in 12 of the last 13 months.

Rising prices and sluggish job growth do not give the Federal Reserve much room to maneuver. A tight credit policy, added to the reported wariness of some banks and thrift institutions to lend to real estate developers and small businesses, could cool inflation but also job growth.

Fortunately, recent reports on both manufacturing activity and long-term interest rates hold comforting news. The National Association of Purchasing Management's Index of Industrial Activity rose to 50.2 percent in April, after being stuck below 50 percent for the last 11 months. A reading of less than 50 percent is taken to mean that the manufacturing sector is in decline. Moreover the government's Index of Leading Indicators increased 0.9 percent in March, the biggest jump since June of 1988. Finally, the carefully watched sale of federal 30-year bonds in the first part of May resulted in unexpected low yields of 8.84 percent, suggesting that long-term interest rates may be declining.

The State of Michigan

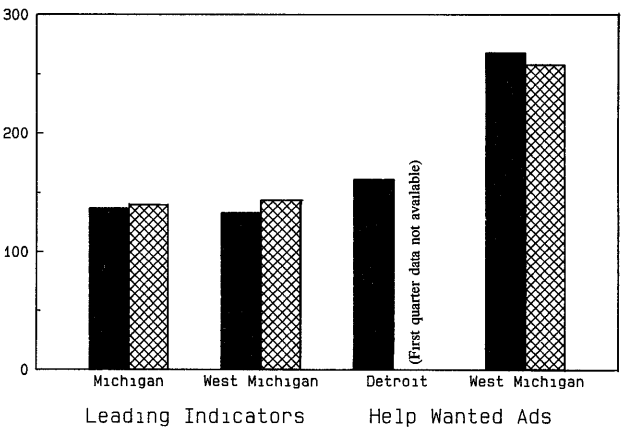
Statewide, total employment fell 1.0 percent in the first quarter of 1990, due partially to temporary layoffs in the state's auto industry in January. Improved car sales and a stabilizing manufacturing sector nationwide should at least diminish the rate of employment decline in the state's manufacturing sector in the coming months.

The state's manufacturing sector suffered a 3.3 percent drop in employment during the first quarter, on top of a 1.8 percent decline in the previous quarter. The bulk of the employment decrease can be attributed to the auto industry layoffs. Adjusting for expected seasonal fluctuations, 55,000 jobs were lost in January in the state's manufacturing sector; however, over 44,000 jobs either reopened or were created by March.

Nonmanufacturing employment fell 0.3 percent in the first quarter, partially in response to the above decline in manufacturing. Government employment remained unchanged during the quarter.

The state's unemployment rate rose to 7.7 percent in the first quarter, as the number of individuals out of work grew 0.4 percent. The state's unemployment rate in the first quarter was a full 1.0 percent above its level of the previous year.

Chart 3
Michigan and West Michigan Indexes
Fourth Quarter ■ 1989 and First Quarter ▨ 1990
(1982=100)



Manufacturing employment should improve statewide in the coming months. The state's Index of Leading Indicators rose 2.2 percent, despite the deterioration of two of the three statewide components of the index. Average weekly hours of production workers fell 2.6 percent in the first quarter, on top of a 0.7 percent decline in the previous quarter. In addition, initial claims for unemployment insurance jumped 24.2 percent in the quarter, after falling 4.5 percent in the last quarter of 1989. The jump in claims can be attributed, once again, to the temporary layoffs in the state's auto industry. On the positive side, the number of new dwelling units put under contract rose 23.6 percent in the quarter.

Unfortunately, the Detroit Help-Wanted Advertising Index is not available yet for the first quarter, due to technical

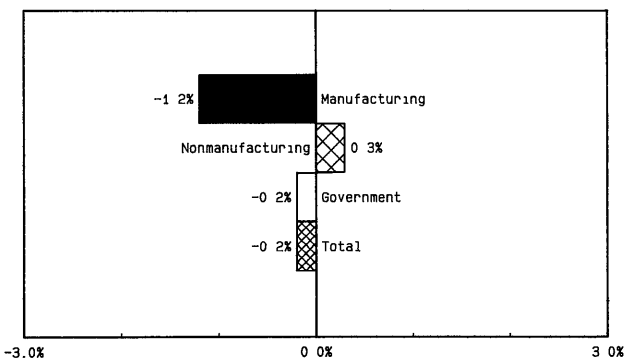
difficulties associated with the merger of the city's two major papers. We foresee, however, only modest employment growth, at best, in nonmanufacturing until the state's manufacturing sector has recovered from its first-quarter decline.

Federal expenditures on needed public infrastructure, purchases of goods and services produced in the state, and the payrolls of federal agencies play an important role in determining the economic vitality of the state. Unfortunately, according to a new study prepared by the Northeast-Midwest Institute, Michigan, as well as the other Great Lake States, has not been getting back in federal funds what it is sending to the U.S. government in taxes. For every dollar Michigan's residents and businesses paid in taxes to the federal government from 1981 to 1988, only 75 cents in federal funds returned to the state. During this period, if Michigan had received from the federal government what it paid in taxes, it would have secured $56.3 billion more in federal spending; if Michigan's share of federal spending matched its share of the nation's population, it would have received $52.3 billion more in federal dollars.[1]

Outlook for West Michigan

Total employment fell 0.2 percent in the five metropolitan areas of West Michigan during the first quarter of 1990. The region's manufacturing sector suffered major employment declines, which outweighed a modest increase in nonmanufacturing employment. We foresee improving employment conditions in the region's manufacturing sector in the coming months, although we may have to wait longer for substantial improvements in the region's nonmanufacturing sector.

Chart 4
West Michigan Employment
Percentage Change, First Quarter 1990

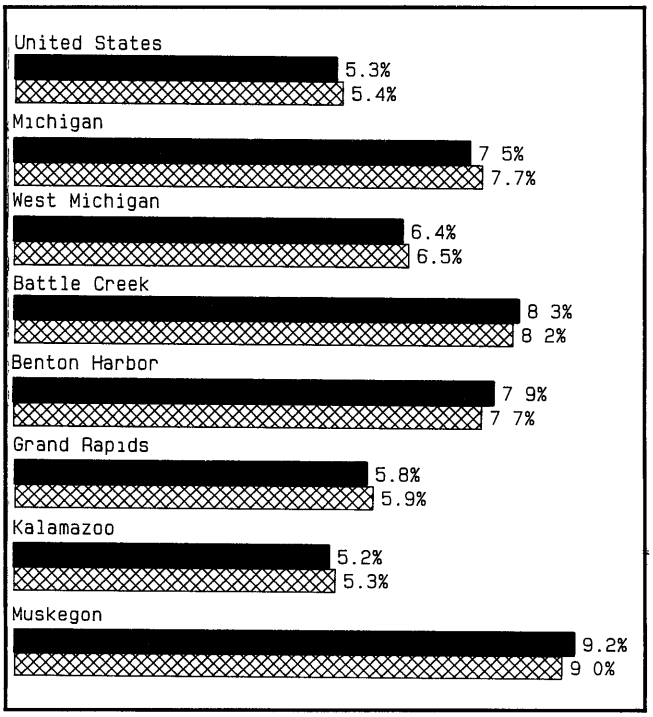


SOURCE: Based on Michigan Employment Security Commission data for 5 MSAs in West Michigan.

Employment in manufacturing fell 1.2 percent in the first quarter, after declining 0.9 percent in the previous quarter. Employment in the region's nonmanufacturing sector rose just 0.3 percent, less than half of its 0.7 percent growth in the last quarter of 1989. Finally, government employment fell 0.2 percent in the quarter.

West Michigan's first quarter performance was very similar to the nation's at large, except in government employment. Both the region's decline in manufacturing employment and its modest employment growth in nonmanufacturing closely matched those of the nation's, 1.1 percent and 0.2 percent, respectively. Nationwide, government employment rose 2.2 percent, however, far surpassing the region's modest decline.

Chart 5
Unemployment Rates
Fourth Quarter 1989 and First Quarter 1990



The region's unemployment rate remained stable in the first quarter, rising just 0.1 percentage points to 6.5 percent. The number of individuals unemployed rose 0.3 percent.

The continuing decline in manufacturing employment is hampering employment growth in nonmanufacturing, through both declining consumption expenditures and declining orders from the manufacturing sector for business and professional services. Fortunately, we expect improving employment conditions in the region's manufacturing sector in the coming months. The region's Index of Leading Indicators jumped 8.3 percent, despite two of its three local components worsening.

Average weekly hours for production workers fell a slight 0.7 percent in the first quarter, after declining 0.2 percent in the previous quarter. Furthermore, the number of initial

claims for unemployment insurance rose 18.0 percent in the quarter, offsetting a 4.5 percent decline in the last quarter of 1989. On the other hand, the number of new dwelling units put under contract soared 59.6 percent, due partially to unseasonably mild weather.

The region's composite Index of Help-Wanted Advertising fell 3.7 percent in the first quarter, after falling at a similar rate of 3.6 percent in the previous quarter. Since this index tracks new openings primarily in nonmanufacturing, we foresee little immediate improvement in job growth in that employment sector. With the expected rebound in the region's manufacturing sector, however, we foresee nonmanufacturing employment to improve, perhaps, in the third quarter.

NOTE

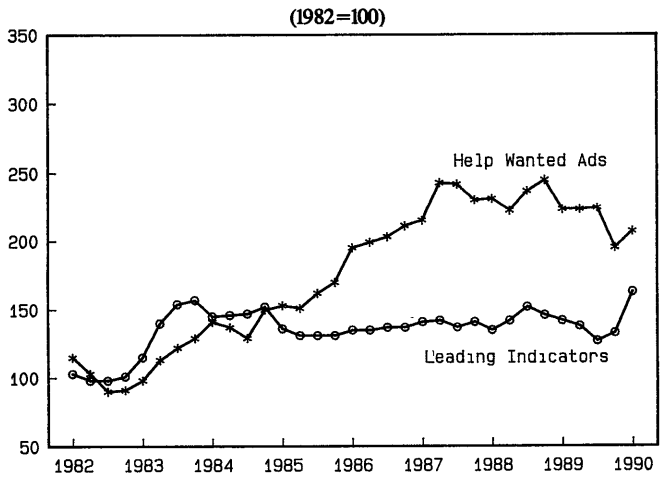
1. For a copy of the full report, *The Flow of Federal Funds, 1981-1988: A $359 Billion Imbalance*, contact the Northeast-Midwest Institute, 218 D Street SE, Washington, D.C. 20003, telephone (202) 544-5200.

The BUSINESS OUTLOOK for the BATTLE CREEK MSA

Total employment grew by 0.3 percent in the Battle Creek MSA during the first quarter of 1990. Further employment growth in both manufacturing and nonmanufacturing is suggested by a large jump in the area's Index of Leading Indicators and a more moderate rise in its Help-Wanted Advertising Index.

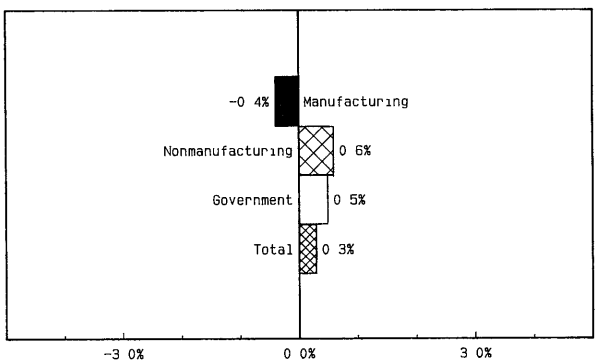
Employment in manufacturing declined by just 0.4 percent in the Battle Creek MSA during the first quarter of 1990, compared to a 3.3 percent plunge statewide. In the previous quarter, area manufacturing employment plummeted by 3.4 percent due to a strike at Post Cereal, a division of Kraft General Foods. Despite the return to work of the 1,000 striking cereal workers, manufacturing employment continued to decline in the area during the first quarter because of employment reductions in durable goods production and in the area's cereal industry.

Chart BC-1
Battle Creek Indexes
by Quarter - First of 1982 to First of 1990



Long-term employment growth in manufacturing looks promising, however. Fawn Industries, a Maryland-based manufacturer of plastic automotive parts, is considering the construction of a 30,000 square foot facility in the Fort Custer Industrial Park, which would initially employ 50 workers. Also, in their most recent trip to Japan, city officials brought home commitments from two small Japanese manufacturing firms to build production facilities in the Park. Each facility would employ 50 to 100 workers. Currently, 13 companies with Japanese ties have built production facilities in the industrial park.

Chart BC-2
Battle Creek Employment
Percentage Change, First Quarter 1990



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

Employment in nonmanufacturing rose 0.6 percent in the first quarter, on top of a 1.4 percent increase in the previous quarter. By contrast, statewide employment in nonmanufacturing fell 0.3 percent during the first quarter. Further employment increases in the area are assured by Transamerica Insurance Group's recent announcement of plans to consolidate much of its business activities in Battle Creek, adding as many as 350 workers to the city's downtown. The company has indicated that it intends to move into the former Harcourt Brace Jovanovich Insurance Company building, which has remained mostly vacant since HBJ moved its operations and 550 jobs to Florida in 1987.

The area's unemployment rate dropped slightly to 8.2 percent in the first quarter, but is still much higher than its 6.6 percent level of a year ago.

Continued growth in the area's nonmanufacturing sector is suggested by the 6.2 percent increase in its Index of Help-Wanted Advertising. Similarly, employment conditions in manufacturing are expected to improve in the coming months, based on the area's Index of Leading Indicators soaring by 22.6 percent. The climb was due to both a stronger national economy and robust local construction activity.

The unseasonably mild winter allowed the local construction to get an early start, as the number of new dwelling units put under contract soared 226.1 percent in the first quarter. This hike comes after an 82.7 percent rise in the previous

quarter. The other two local components of the Index, however, deteriorated in the first quarter. Average weekly hours of production workers fell 1.4 percent, offsetting its 0.2 percent rise in the previous quarter. Finally, the number of initial claims for unemployment insurance rose 10.2 percent, on top of a minor 0.6 percent rise in the previous quarter.

Avtek, a fledgling aircraft manufacturer with hopes of landing up to 1,100 jobs at Battle Creek's W. K. Kellogg Airport, filed bankruptcy. The project is definitely grounded, but hopes are still flying that the aircraft and its unique design and use of advanced plastics will attract the necessary financing to get it airborne once again.

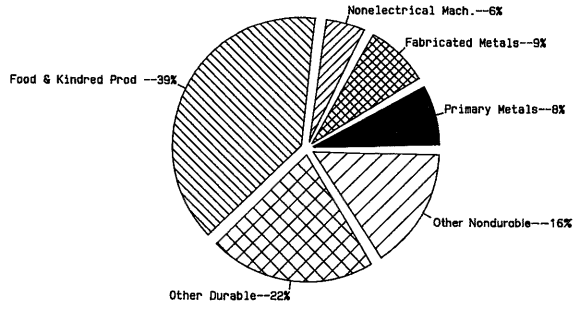
Table BC-1
Battle Creek (Calhoun County) Statistics
(Adjusted for seasonal variations)

Measure	1990 first quarter	1989 fourth quarter	Percent change fourth to first	1989 first quarter	Percent change first to first
Employment:					
Manufacturing	16,400	16,460	-0.4	16,740	-2.0
Nonmanufacturing	32,310	32,120	0.6	30,970	4.3
Government	11,640	11,580	0.5	11,650	-0.1
Total	60,350	60,160	0.3	59,360	1.7
Unemployment:					
Number unemployed	5,450	5,570	-2.2	4,340	25.6
Unemployment rate	8.2	8.3	-0.1	6.6	1.6
Local indexes:					
Help-wanted ads	207	195	6.2	229	-9.6
Leading indicators	163	133	22.6	143	14.0
Local components:					
Average weekly hours	42.0	42.6	-1.4	44.4	-5.4
UI initial claims	390	354	10.2	275	41.8
New dwelling units[a]	1,132	347	226.1	235	381.8

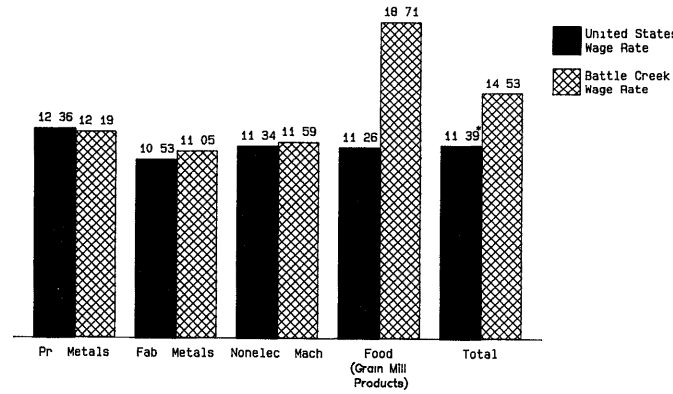
SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Battle Creek Enquirer* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

Battle Creek MSA
Manufacturing Employment and Earnings



% of Employment
Annual Average 1989



*National average for the mix of industries found in the Battle Creek MSA.
SOURCE Bureau of Economic Analysis.

Average Hourly Earnings
(1989 dollars)

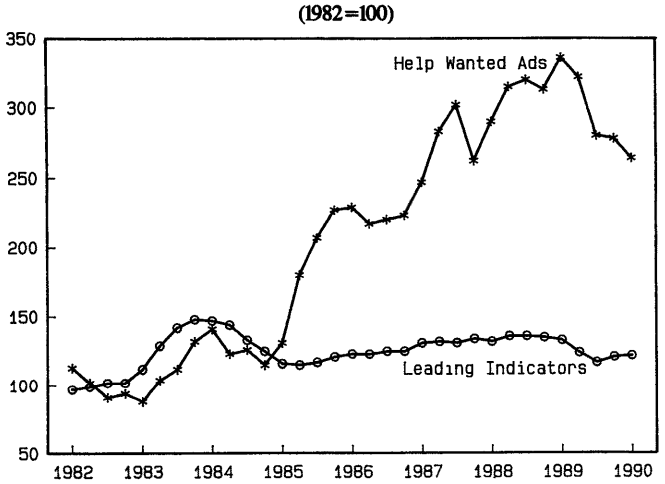
The large difference in the average hourly earnings of production workers in food manufacturing (Grain Mill Products) between the Battle Creek MSA and the United States caused average hourly earnings in the area to be 27.6 percent higher than the national average in 1989. The average hourly earnings in food manufacturing, which employs 39 percent of Battle Creek's total manufacturing workforce, were 66 percent higher than those of the United States.

The BUSINESS OUTLOOK for the BENTON HARBOR MSA

Total employment edged upwards by 0.2 percent in the first quarter of 1990 in the Benton Harbor MSA. We expect only meager job growth in the coming months in both the area's nonmanufacturing and manufacturing sectors.

Employment in manufacturing fell 1.5 percent in the first quarter, on top of a 2.4 percent decline in the previous quarter. Despite the decline, the area still compared favorably to the state, which lost 3.3 percent of its manufacturing employment. Employment reductions occurred in the area's nonelectrical machinery and plastics industries; however, no major layoffs were reported in the quarter.

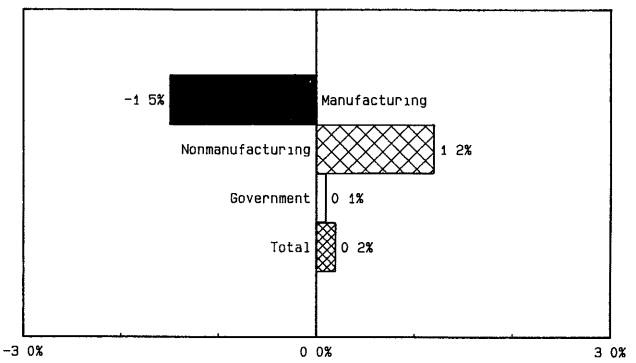
Chart BH-1
Benton Harbor Indexes
by Quarter - First of 1982 to First of 1990
(1982=100)



Several firms declared expansion plans that will bolster the county's manufacturing sector. The Whirlpool Corporation announced that it will expand employment at its existing consumer center from its current level of 90 to 125 individuals Chadwick and Cunningham Ltd., a furniture maker, is moving its production facility from Niles to Benton Harbor. More important, in the coming years it plans to hire and train 150 new workers, many of whom will be city residents. Finally, Zenith Data Systems (ZDS) is transferring approximately 120 employees from its St. Joseph facility to the former Gerber baby wear plant in Three Oaks that it recently purchased. Few new jobs will be created, but the move will allow space for the company to introduce new equipment at its St. Joseph plant.

Employment in nonmanufacturing rose a healthy 1.2 percent in the first quarter, doubling its rate of growth in the previous quarter. In comparison, nonmanufacturing employment, statewide, declined 0.3 percent.

Chart BH-2
Benton Harbor Employment
Percentage Change, First Quarter 1990



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

The area's unemployment rate fell 0.2 percentage points to 7.7 percent in the first quarter, as the number of unemployed workers declined by 3.6 percent. The area's unemployment rate remains a full percentage point above last year's levels, however.

Little improvement is expected in area employment. In fact, employment in the area's nonmanufacturing sector may slow in the coming months. The Index of Help-Wanted Advertising fell 5.0 percent, indicating fewer posting for positions primarily in the nonmanufacturing sector. The Index of Leading Indicators, which tracks manufacturing activity, inched up 0.8 percent.

The local components of the area's Index of Leading Indicators were mixed. Average weekly hours of production workers did not budge in the quarter, after falling 2.1 percent in the previous period. Initial claims for unemployment insurance rose 7.9 percent in the quarter, partially offsetting a 13.8 percent drop in the previous quarter. Finally, the number of new dwelling units put under contract rose 13.7 percent, on top of a 11.8 percent increase in the last quarter of 1989.

Whirlpool Corporation and the Benton Harbor Public Schools have formed a partnership which holds great pro-

mise of improving the quality and assuring the success of public education in the city. As a first step, Whirlpool has hired EDA Systems, Inc. of Washington, D.C. to conduct a six-month study of the city's public schools, which will focus on enhancing student achievement, operational efficiency, and community support.

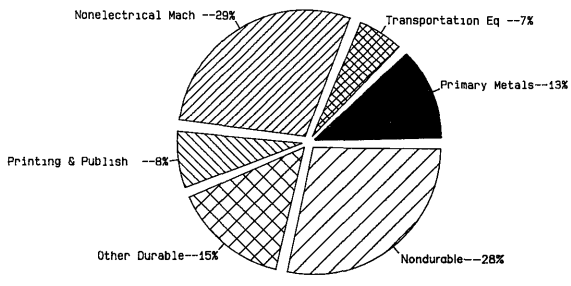
Table BH-1
Benton Harbor (Berrien County) Statistics
(Adjusted for seasonal variations)

Measure	1990 first quarter	1989 fourth quarter	Percent change fourth to first	1989 first quarter	Percent change first to first
Employment:					
Manufacturing	20,730	21,040	-1.5	21,960	-5.6
Nonmanufacturing	37,160	36,720	1.2	35,690	4.1
Government	8,680	8,670	0.1	8,610	0.8
Total	66,570	66,430	0.2	64,840	2.7
Unemployment:					
Number unemployed	6,100	6,330	-3.6	5,400	13.0
Unemployment rate	7.7	7.9	-0.2	6.7	1.0
Local indexes:					
Help-wanted ads	264	278	-5.0	344	-23.3
Leading indicators	122	121	0.8	133	-8.3
Local components:					
Average weekly hours	42.9	42.9	0.0	43.7	-1.8
UI initial claims	326	302	7.9	230	41.7
New dwelling units[a]	506	445	13.7	379	33.7

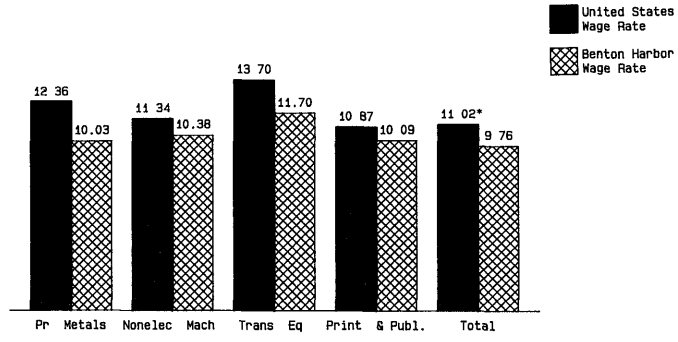
SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Benton Harbor Herald Palladium* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

Benton Harbor MSA
Manufacturing Employment and Earnings



% of Employment
Annual Average 1989



*National average for the mix of industries found in the Benton Harbor MSA.
SOURCE: Bureau of Economic Analysis.

Average Hourly Earnings
(1989 dollars)

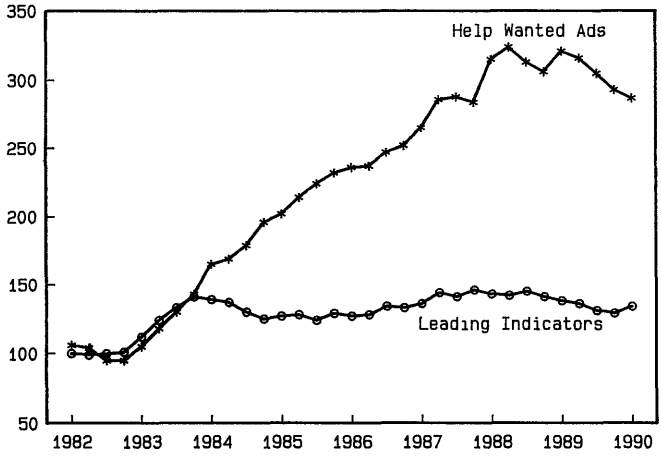
In 1989, average hourly earnings of production workers in the Benton Harbor MSA's manufacturing sector were 11.4 percent lower than the average for the United States, when adjusted for the area's mix of industries. The area's primary metals and transportation equipment producers paid, on average, wages that were 18.9 and 14.6 percent below the industries' national average, respectively. Average hourly earnings in nonelectrical machinery were also slightly below the national average.

The BUSINESS OUTLOOK for the GRAND RAPIDS MSA

Total employment inched downward 0.1 percent in the Grand Rapids MSA during the first quarter of 1990 due to employment declines in manufacturing. The area's manufacturing employment trends should improve in the coming months; however, little change is expected in the area's nonmanufacturing sector.

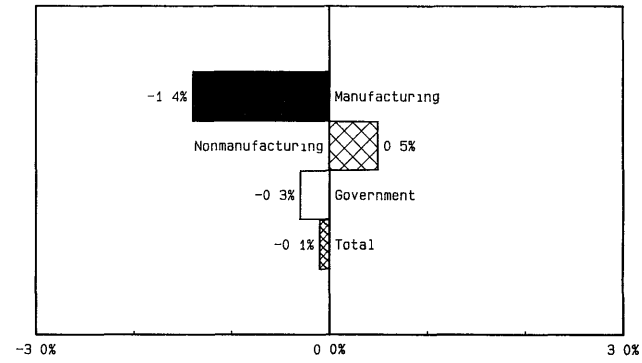
Employment in manufacturing fell 1.4 percent in the first quarter of 1990, after declining a modest 0.3 percent in the previous quarter. The employment declines took place in the area's durable goods industries, including furniture, fabricated metals, and electrical equipment. Employment in nondurable goods remained stable. The broad-based nature of the employment declines are indicative of the general slowdown in the national manufacturing sector over the past six months and cannot be blamed on the troubles of a single industry. The area still performed better overall than the state, which suffered a 3.3 percent decline in manufacturing employment in the quarter.

Chart GR-1
Grand Rapids Indexes
by Quarter - First of 1982 to First of 1990
(1982=100)



The area's Index of Leading Indicators rose 3.9 percent in the first quarter, after declining modestly over the past five quarters. The rise is due to both the improving national economy and a jump in local residential construction. While it is too early to announce a turnaround, employment trends could improve in the area's manufacturing sector. Moreover, the index is in agreement with the April survey of area purchasing managers, conducted by the Grand Rapids Association of Purchasing Management, which reported strong improvements in area sales, production, and purchases among its surveyed companies.

Chart GR-2
Grand Rapids Employment
Percentage Change, First Quarter 1990



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

The local components of the index were mixed. Average weekly hours of production workers fell 1.0 percent, nearly matching its 1.2 percent decline in the previous quarter. New claims for unemployment insurance rose sharply, 23.9 percent, after falling 4.3 percent in the last quarter of 1989. On the positive side, assisted by the unseasonably mild winter, the number of new dwelling units put under contract rose 38.5 percent, offsetting its 12.7 percent decline in the previous period.

Employment in nonmanufacturing rose 0.5 percent in the first quarter, matching its growth in the previous quarter. Further improvement in nonmanufacturing employment is not expected in the coming months. The area's Index of Help-Wanted Advertising fell 2.0 percent in the first quarter, after falling 2.6 percent in the previous quarter; this indicates little improvement in employment growth in the area's nonmanufacturing sector. Recently, AT&T announced that it will close its Grand Rapids service center, eliminating up to 70 jobs.

The area's unemployment rate rose 0.1 percent to 5.9 percent, as the number of the unemployed grew 2.7 percent. The area's unemployment is more than a full percentage point above its levels of a year ago.

In January, the City of Grand Rapids tightened its transfer/waiver policies on tax abatements. Under its new policy the city will grant an employment waiver, which is required before another local government can grant a tax abatement to a migrating firm, if:

1. the firm is relocating to an existing building in need of rehabilitation or restoration;

2. the other local governmental unit signs a tax-sharing agreement.

The new policy is receiving its first test as Zondervan Corporation, a book publisher, announced its intentions to consolidate operations at a new plant in Cascade Township. The firm currently employs 350 workers at two older facilities in Grand Rapids and 180 workers in Kentwood. Kentwood has granted a transfer waiver, citing that it expects little difficulty in finding a new tenant for its Zondervan facility. Grand Rapids, however, is sticking to its policy. Cascade Township has not yet agreed to a tax-sharing agreement.

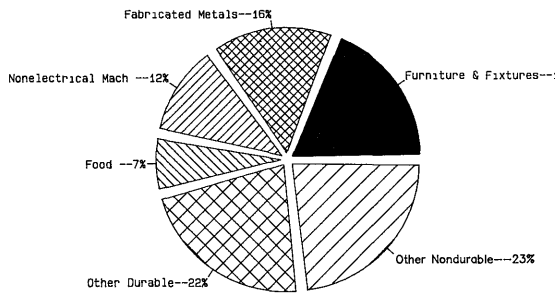
Table GR-1
Grand Rapids (Kent & Ottawa Counties) Statistics
(Adjusted for seasonal variations)

Measure	1990 first quarter	1989 fourth quarter	Percent change fourth to first	1989 first quarter	Percent change first to first
Employment:					
Manufacturing	100,910	102,300	-1.4	101,870	-0.9
Nonmanufacturing	211,940	210,860	0.5	203,940	3.9
Government	34,270	34,360	-0.3	33,330	2.8
Total	347,120	347,520	-0.1	339,140	2.4
Unemployment:					
Number unemployed	22,220	21,640	2.7	17,720	25.4
Unemployment rate	5.9	5.8	0.1	4.8	1.1
Local indexes:					
Help-wanted ads	287	293	-2.0	322	-10.9
Leading indicators	134	129	3.9	138	-2.9
Local components:					
Average weekly hours	40.5	40.9	-1.0	41.7	-2.9
UI initial claims	1,411	1,139	23.9	949	48.7
New dwelling units[a]	7,123	5,142	38.5	4,774	49.2

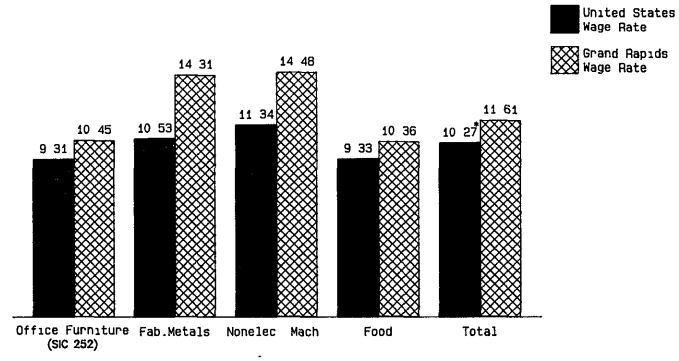
SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Grand Rapids Press* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

Grand Rapids MSA
Manufacturing Employment and Earnings



% of Employment
Annual Average 1989



*National average for the mix of industries found in the Grand Rapids MSA.
SOURCE: Bureau of Economic Analysis.

Average Hourly Earnings
(1989 dollars)

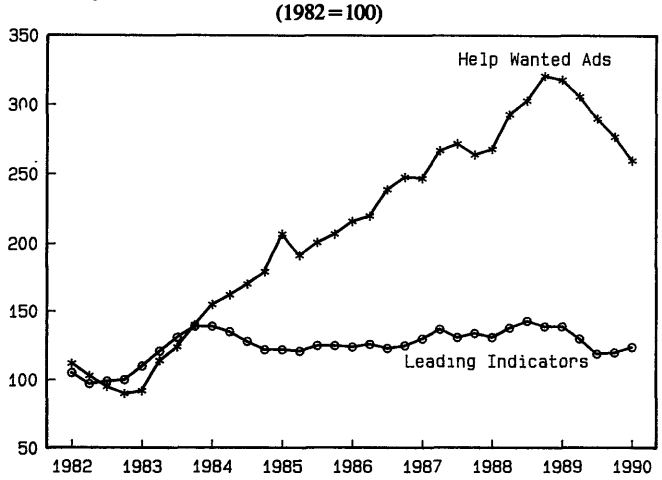
In 1989, the average hourly earnings of production workers in the Grand Rapids MSA's manufacturing sector were 13.0 percent higher than the average for the United States, when adjusted for the area's mix of industries. The area's fabricated metals and nonelectrical machinery producers paid the highest wages, being on average 35.9 and 27.7 percent above national hourly earnings for the industries. The area's furniture industry employed 19 percent of the manufacturing workforce, and its average hourly earnings were 12.2 percent above national averages for the office furniture industry.

The BUSINESS OUTLOOK for the KALAMAZOO MSA

Total employment fell 1.0 percent in the Kalamazoo MSA during the first quarter of 1990. Employment reductions were suffered across the board. Employment growth in manufacturing should improve in the coming months; however, employment in nonmanufacturing may remain at disappointing levels.

Manufacturing employment fell 2.1 percent in the first quarter of 1990, on top of a 0.7 percent decline recorded in the previous quarter. Much of this employment decline was short-lived, however. In mid-December, General Motors temporarily laid off approximately 800 workers at its fabrication plant in Comstock Township. By February, these workers were back on the line. Additional employment reductions were scattered across various industries, indicative of the general slowdown in manufacturing nationwide.

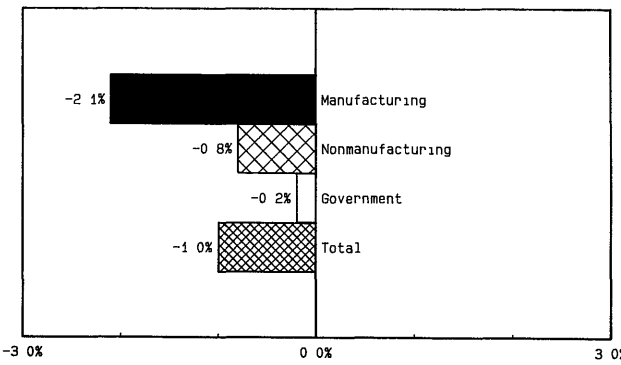
Chart K-1
Kalamazoo Indexes
by Quarter – First of 1982 to First of 1990
(1982=100)



In March, the last transmission rolled off the line at the General Motors facility in Three Rivers, beginning an indefinite layoff for 220 hourly workers. The remaining 330 workers at the plant will be laid off by August, as a multiyear retooling program is initiated at the facility. The retooling should be completed by the middle of 1991, with employment reaching 700 at full production in 1993.

Nonmanufacturing employment fell 0.8 percent in the first quarter, offsetting its 1.0 percent rise in the previous quarter. The area's Index of Help-Wanted Advertising fell 6.1 percent in the first quarter, suggesting fewer employment opportunities for primarily nonmanufacturing positions, and indicating that little improvement can be expected.

Chart K-2
Kalamazoo Employment
Percentage Change, First Quarter 1990



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

The area's Index of Leading Indicators rose 3.3 percent in the first quarter, suggesting improving employment conditions in the area's manufacturing sector. The increase in the index is attributed to the general improvement in the national economy and unseasonably mild weather conditions. Of the local components of the index, only the number of new dwelling units put under contract rose in the first quarter. In fact, it soared 109.2 percent in the quarter, on top of a 15.3 percent rise in the previous quarter.

The other two local components of the index worsened. The average weekly hours of production workers fell 1.0 percent, matching the decline in the previous quarter. Initial claims for unemployment insurance rose 23.9 percent, after falling 3.1 percent in the last quarter of 1989.

The area's unemployment rate inched up only 0.1 percentage point to 5.3 percent in the first quarter, in spite of the full 1.0 percent cutback in employment.

The area's nonmanufacturing sector will receive a boost in November with the completion of First of America's Operation Center currently under construction in Texas Township. First of America will consolidate most of the "backroom" functions of its acquired banks in Michigan, Indiana, and Illinois and employ 900 workers at the facility.

The long-term employment outlook for manufacturing also improved with a consultant's report, recommending that Western Michigan University develop a research and business

park on its 300 acre parcel of vacant land located in the southwest corner of the City of Kalamazoo.

After months of public meetings and hearings, residents of Kalamazoo's Northside Neighborhood voted to protect their neighborhood from possible negative environmental impacts resulting from the construction of a hazardous chemical recycling facility. By a margin of 2 to 1, residents voted against Research Oil Company of Cleveland building a $10–12 million facility on an industrially zoned parcel in the neighborhood. The company offered a benefit package for neighborhood residents which guaranteed 60 percent of the 125 jobs at the facility for neighborhood residents and at least four annual college scholarships for neighborhood students.

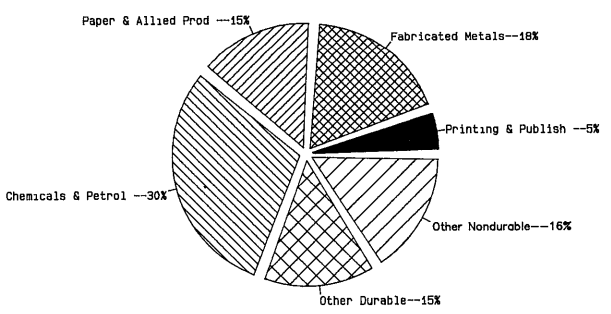
Table K-1
Kalamazoo (Kalamazoo County) Statistics
(Adjusted for seasonal variations)

Measure	1990 first quarter	1989 fourth quarter	Percent change fourth to first	1989 first quarter	Percent change first to first
Employment:					
Manufacturing	29,770	30,410	-2.1	30,950	-3.8
Nonmanufacturing	63,960	64,470	-0.8	62,280	2.7
Government	17,640	17,670	-0.2	17,430	1.2
Total	111,370	112,550	-1.0	110,660	0.6
Unemployment:					
Number unemployed	6,300	6,280	0.3	5,670	11.1
Unemployment rate	5.3	5.2	0.1	4.7	0.6
Local indexes:					
Help-wanted ads	260	277	-6.1	318	-18.2
Leading indicators	124	120	3.3	138	-10.1
Local components:					
Average weekly hours	41.0	41.4	-1.0	42.8	-4.2
UI initial claims	462	373	23.9	275	68.0
New dwelling units[a]	2,780	1,329	109.2	2,049	35.7

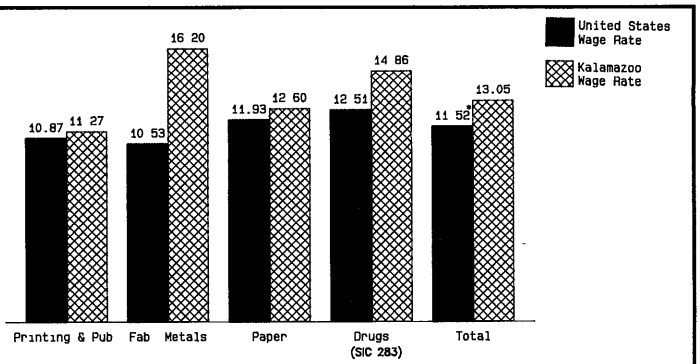
SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Kalamazoo Gazette* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

Kalamazoo MSA
Manufacturing Employment and Earnings



% of Employment
Annual Average 1989



*National average for the mix of industries found in the Kalamazoo MSA
SOURCE: Bureau of Economic Analysis.

Average Hourly Earnings
(1989 dollars)

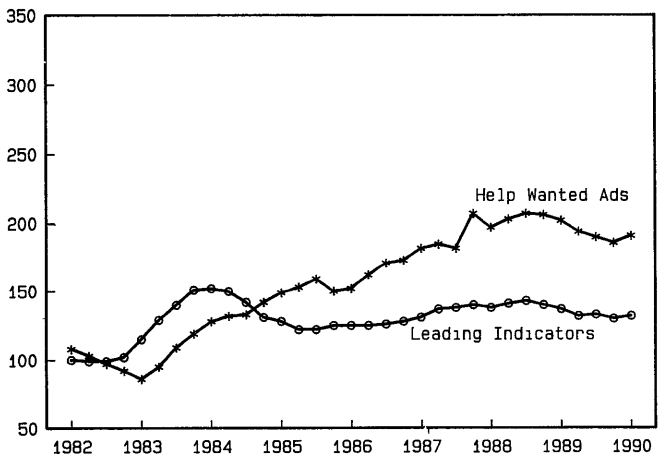
In 1989, the average hourly earnings of production workers in the Kalamazoo MSA's manufacturing sector were 13.3 percent higher than the average for the United States, when adjusted for the area's industrial mix. The fabricated metals industry showed the largest difference in wages as compared to the nation, with average hourly earnings 53.8 percent higher than the national average for the industry. The industry employed 18 percent of the area's manufacturing workforce. Earnings in the area's chemical industry, which employed 30 percent of the manufacturing workforce, were 18.8 percent above national average for drug manufacturers.

The BUSINESS OUTLOOK for the MUSKEGON MSA

Total employment fell 0.6 percent in the Muskegon MSA in the first quarter of 1990. Strong employment reductions in the area's nonmanufacturing sector contributed to the decline. Employment conditions should improve in the coming months, however, in both manufacturing and nonmanufacturing.

Manufacturing employment inched up 0.1 percent in the first quarter in the Muskegon MSA, after increasing 0.4 percent in the previous quarter. Muskegon was the only metropolitan area in West Michigan to achieve employment growth in manufacturing, and significantly outperformed the state, overall, which suffered a 3.3 percent employment decline in manufacturing.

Chart M-1
Muskegon Indexes
by Quarter - First of 1982 to First of 1990
(1982=100)

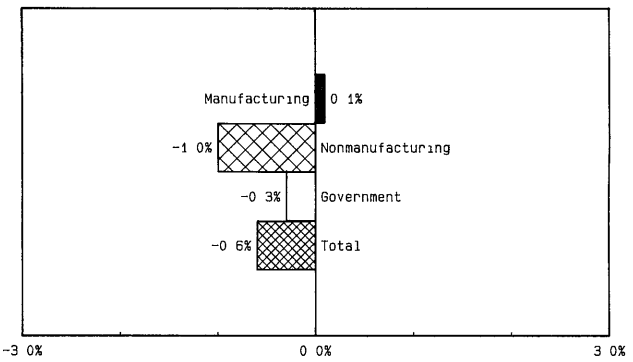


Unfortunately, nonmanufacturing employment stumbled, falling 1.0 percent in the first quarter. It had risen 0.4 percent in the last quarter of 1989. Employment in government also fell 0.3 percent in the first quarter, erasing half of its 0.6 percent rise in the previous quarter.

The area's unemployment rate declined by 0.2 percentage points to 9.0 percent, as the number of unemployed workers dropped by 3.5 percent. The area still bears the highest unemployment rate in West Michigan, and its current jobless rate is 0.6 percentage points higher than last year's.

Both the area's Index of Help-Wanted Advertising and Index of Leading Indicators rose in the first quarter, suggesting improving employment conditions in the coming months. The area's barometer of help-wanted ads rose 2.7 percent, and its Index of Leading Indicators increased 1.5 percent.

Chart M2
Muskegon Employment
Percentage Change, First Quarter 1990



SOURCE: Based on Michigan Employment Security Commission data. Seasonally adjusted by the Institute.

The local components of the area's Index of Leading Indicators were mixed. Average weekly hours of production workers rose a healthy 2.0 percent in the first quarter, on top of a 0.5 percent increase in the previous quarter. In addition, the number of new dwelling units put under contract rose 28.8 percent in the quarter, partially due to the unseasonably mild winter. On the downside, initial claims for unemployment insurance rose 11.0 percent in the quarter after falling 4.5 percent.

GTE North Incorporated announced plans to consolidate its statewide service centers in Muskegon. The consolidation will take approximately 18 months and result in an employment increase of 50 workers.

Finally, efforts to revitalize the Muskegon downtown took a big step forward as the Muskegon Downtown Development Authority unanimously approved the issuance of $5.7 million in bonds for both the renovation of the existing mall and the reimbursement to SPX Corporation for its construction of a road to the Terrace Point development area. The ambitious development plan for the downtown area calls for two new retail anchors, a two-tier shopping concourse between the proposed new anchors and the existing mall, the construction of a downtown theatre, and a lakefront park.

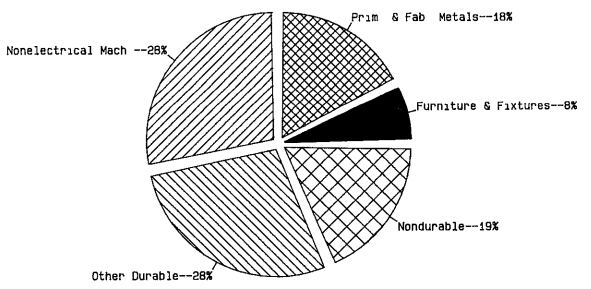
Table M-1
Muskegon (Muskegon County) Statistics
(Adjusted for seasonal variations)

Measure	1990 first quarter	1989 fourth quarter	Percent change third to first	1989 first quarter	Percent change first to first
Employment:					
Manufacturing	17,020	17,010	0.1	17,240	-1.3
Nonmanufacturing	32,160	32,490	-1.0	31,360	2.6
Government	9,750	9,780	-0.3	9,390	3.8
Total	58,930	59,280	-0.6	57,990	1.6
Unemployment:					
Number unemployed	6,140	6,360	-3.5	5,740	7.0
Unemployment rate	9.0	9.2	-0.2	8.4	0.6
Local indexes:					
Help-wanted ads	191	186	2.7	200	-4.5
Leading indicators	132	130	1.5	138	-4.3
Local components:					
Average weekly hours	41.7	40.9	2.0	40.9	2.0
UI initial claims	415	374	11.0	317	30.9
New dwelling units[a]	777	604	28.8	413	88.2

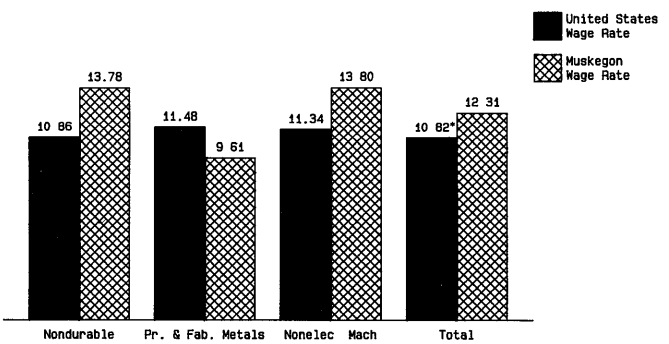
SOURCES: W. E. Upjohn Institute for Employment Research. Based on dwelling data from F. W. Dodge Division, McGraw Hill Information Systems Company, ad count from *Muskegon Chronicle* and employment data from Michigan Employment Security Commission. National components in Table A-3.

a. New dwelling unit data are seasonally adjusted annual rates.

Muskegon MSA
Manufacturing Employment and Earnings



% of Employment
Annual Average 1989



*National average for the mix of industries found in the Muskegon MSA.
SOURCE: Bureau of Economic Analysis.

Average Hourly Earnings
(1989 dollars)

In 1989, the average hourly earnings of production workers in the Muskegon MSA's manufacturing sector were 13.8 percent higher than those of the United States, when adjusted for the area's industrial mix. Earnings in the area's nondurable goods industries were 26.9 percent above national averages. The nonelectrical machinery industry employed 28 percent of the workforce and had hourly earnings, on average, 21.7 percent higher than the nation. The metals industry comprised 18 percent of the workforce and paid earnings 16.3 percent below the national average.

Definitions of terms as used in this quarterly

Business Cycle Turning Dates: The historical business cycle turning dates used in this report are those designated by the National Bureau of Economic Research, Inc. (NBER). They mark the approximate dates when, according to NBER, aggregate economic activity reached its cyclical high (peak) or low (trough) levels.

Central City: An incorporated city or urbanized area defined by the U.S. Office of Management and Budget as having the largest population in the metropolitan statistical area in 1980. For an additional city to be included in the name of an MSA, the employment/residence ratio must be at least 0.75, with out-commuting of less than 60 percent of that city's resident employed workers.

Employment: In this quarterly, "employment" is used instead of the more precise term, "wage and salary employment." The MESC employment data shown refer to "jobs by place of work," or nonagricultural employment.

Manufacturing: The estimate of the number of workers on the payrolls of privately owned firms engaged in the production of durable or nondurable goods.

Nonmanufacturing: The estimate of the number of workers on the payrolls of privately owned firms that provide services rather than goods. (Construction and mining are included.)

Government: The estimate of the number of workers on national, state, or local governmental payrolls.

Historical data: Monthly, quarterly, or yearly information for past periods. (Shown in appendix tables.)

Index of Leading Indicators, State & MSAs: A (composite) index with seven components (see Tables A-2 and A-3).

Index of Leading Indicators, United States: A (composite) index based on 11 major components made up of 60 series. Marginal employment adjustment measures include average weekly hours in manufacturing employment and average weekly initial UI claims. One of the two job vacancy series is Help-Wanted Advertising. New private housing units are part of the fixed capital investment component. For a complete list see *Business Conditions Digest* and the 1984 *Handbook of Cyclical Indicators,* The U.S. Department of Commerce, Bureau of Economic Analysis.

Initial Claims: A count of the number of new claims filed for unemployment insurance (UI) for regular state programs. Each initial claim filed indicates a new spell of unemployment for an experienced worker. In Michigan, to be eligible for benefits, an individual must have earned wages of at least 30 times the state minimum hourly wage (currently $3.35) during not less than 20 of the 52 consecutive calendar weeks preceding the benefit year. Each such week is termed a "credit week." An individual may qualify with as few as 14 credit weeks, however, if base period wages have been in excess of 20 times the state average weekly wage (currently $433.91).

Michigan Employment Security Commission (MESC): Michigan Employment Security Commission is a state agency that administers the Job Service and the state/federal unemployment insurance programs and provides labor market information in keeping with state and federal reporting requirements.

MSA (1983 definition): In all but New England, one or more counties are defined as a Metropolitan Statistical Area if they contain the following: a large population nucleus (a central city or "urbanized" area) with adjacent communities which have a high degree of economic and social integration. Adjacent counties are included if they have 60 persons per square mile, and/or substantial 1970 to 1980 population growth (20 percent) with 10 percent residing within the urbanized area and a commuting pattern with 15-20 percent of residents working within the central city or urbanized area.

MSAs are also defined as **major labor market areas** by the Michigan Employment Security Commission (MESC). Those labor market areas outside of the MSAs have the peninsula or county name.

National Purchasing Management Selected Components Indexed: The national association conducts a monthly survey of purchasing managers from a scientifically selected sample of firms across the nation. Responses indicate only the direction of change; the percentage reporting favorable changes minus those with unfavorable changes plus 100 equals the index as shown in this quarterly. For those familiar with diffusion indexes, these indexes represent two times the percentage reporting a change in a favorable direction, e.g., more new orders. (The favorable count includes one-half of those reporting no change.)

Time Series: A set of numbers covering a known interval or timespan (e.g., months or quarters) that provide information about a well-defined activity, process or group. For local series that consistently change direction in advance of overall economic activity, see Table A-3. Those measuring current or past economic activity are found in Table A-4.

Unemployed: The number of persons in the labor force who are without a job or on layoff but not expecting to be called back. In order to be counted, an individual must be seeking work.

Vacancy Rate: The percentage of all housing units in existing homes or newly constructed units (visibly ready for occupancy) that are empty and therefore unoccupied. Vacancy rates in Michigan MSAs are determined by U.S. Postal Service delivery workers as part of an annual survey conducted for the Federal Home Loan Bank of Indianapolis. See Table A-5.

Table A-1
Index of Help-Wanted Advertising (1982=100)

Area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1982	1985	1986	1987	1988	1989	1989				1990
							I	II	III	IV	I
Battle Creek MSA	100	159	202	233	234	217	220	223	224	195	207
Benton Harbor MSA	100	186	222	273	309	305	331	322	280	278	264
Grand Rapids MSA	100	218	243	281	314	309	317	316	305	293	287
Kalamazoo MSA	100	202	231	263	296	298	313	306	290	277	260
Muskegon MSA	100	152	165	189	203	192	199	194	190	186	191
West Michigan, 5 MSAs	100	198	225	260	260	283	293	286	278	268	258
Detroit, Michigan MSA	100	194	194	172	177	170	188	170	162	161	n.a.
United States	100	160	161	196	216	208	213	217	203	199	196

SOURCES: West Michigan indexes based on ad counts from the *Battle Creek Enquirer, Benton Harbor Herald Palladium, Grand Rapids Press, Kalamazoo Gazette* and *Muskegon Chronicle;* United States and Detroit indexes derived from (1967=100) series of The Conference Board.

Table A-2
Index of Leading Indicators (1982=100)
(Rounded)

Area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1982	1985	1986	1987	1988	1989	1989				1990
							I	II	III	IV	I
Battle Creek MSA	100	132	136	140	145	134	143	138	127	133	163
Benton Harbor MSA	100	117	124	133	135	124	132	124	117	121	122
Grand Rapids MSA	100	127	131	142	143	133	139	136	131	129	134
Kalamazoo MSA	100	123	124	133	138	127	138	130	119	120	124
Muskegon MSA	100	125	126	137	141	132	136	132	133	130	132
West Michigan, 5 MSAs	100	131	134	145	148	138	147	142	134	133	144
Michigan	100	137	143	154	153	142	150	144	136	137	140

SOURCES: National index from U.S. Department of Commerce, all others from the W. E. Upjohn Institute.

Technical Note

As presently constituted, the components and the range of weights used in the Indexes of Leading Indicators are as follows:

1. *Average weekly hours of production workers in manufacturing.* A separate series is used for each metropolitan area and for the State of Michigan. Weights range from .33 to .47.

2. *Initial claims for unemployment insurance (inverted).* A separate series is used for each metropolitan area and for the State of Michigan. Weights range from .08 to .12.

3. *New dwelling units put under contract (4-term trailing average).* A separate series is used for each metropolitan area and for the State of Michigan. Weights range from .03 to .11.

In addition, each area's index includes the following national measures:

4. *The proportion of firms reporting an increase in new orders.* Weights range from .09 to .13.

5. *The proportion of firms reporting an increase in purchased materials prices.* Weights range from .10 to .14.

6. *The proportion of firms reporting an increase in purchased materials inventories.* Weights range from .08 to .14.

7. *The proportion of firms reporting a change in vendor performance (slower delivery time).* Weights range from .09 to .13.

Table A-3
Components of the Index of Leading Indicators

1. Average Weekly Hours of Production Workers

Area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1985	1986	1987	1988	1989	1989 I	1989 II	1989 III	1989 IV	1990 I
Battle Creek MSA	41.3	41.8	41.9	43.2	42.4	41.9	42.6	42.2	43.0	42.6	42.0
Benton Harbor MSA	39.9	39.7	41.0	40.7	42.1	42.4	43.1	41.9	42.5	42.9	42.9
Grand Rapids MSA	39.9	41.0	40.7	40.1	41.2	41.3	41.8	41.5	41.2	40.9	40.5
Kalamazoo MSA	40.4	43.1	43.1	42.9	42.7	42.1	42.6	42.3	42.1	41.4	41.0
Muskegon MSA	41.4	40.4	40.4	40.9	40.9	41.3	41.0	41.0	43.7	40.9	41.7
West Michigan, 5 MSAs	40.3	41.2	41.2	41.0	41.6	41.6	42.1	41.6	41.9	41.4	41.1
Michigan	40.1	43.1	42.6	42.2	43.2	43.1	43.7	43.3	42.5	42.2	41.1
United States	39.7	40.5	40.7	41.0	41.1	40.9	41.0	41.0	40.9	40.7	40.7

2. Initial Claims for Unemployment Insurance (Average per week)

Area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1985	1986	1987	1988	1989	1989 I	1989 II	1989 III	1989 IV	1990 I
Battle Creek MSA	689	299	304	315	295	318	294	298	353	354	390
Benton Harbor MSA	366	237	259	235	252	289	236	272	353	302	326
Grand Rapids MSA	1,504	1,147	1,152	1,019	1,038	1,061	988	1,013	1,175	1,139	1,411
Kalamazoo MSA	599	308	329	336	292	339	290	327	385	373	462
Muskegon MSA	658	389	397	351	320	354	328	351	382	374	415
West Michigan, 5 MSAs	3,817	2,381	2,440	2,260	2,196	2,361	2,119	2,251	2,641	2,545	3,003
Michigan	37,942	15,624	17,765	17,067	17,053	17,276	15,592	16,137	19,582	19,307	23,971
United States	483,180	394,260	372,650	325,600	304,940	316,880	299,120	309,240	324,420	341,940	349,510

3. New Dwelling Units - Put Under Contract

Area	Annual averages (Selected years)						By quarter (Seasonally adjusted annual rate)				
	1980	1985	1986	1987	1988	1989	1989 I	1989 II	1989 III	1989 IV	1990 I
Battle Creek MSA	219	223	257	181	226	264	298	271	186	347	1,132
Benton Harbor MSA	a	278	418	361	390	383	391	338	385	445	506
Grand Rapids MSA	3,121	4,569	4,963	5,575	5,448	5,214	4,934	5,279	5,667	5,142	7,123
Kalamazoo MSA	1,369	1,007	1,015	1,192	1,485	1,640	2,293	1,920	1,183	1,329	2,780
Muskegon MSA	500	410	393	416	446	531	435	501	608	604	777
West Michigan, 5 MSAs	a	6,487	7,046	7,756	8,028	8,002	8,421	8,256	8,141	7,806	12,456
Michigan	33,113	39,269	47,601	51,482	47,118	43,817	45,228	43,248	43,015	44,752	55,328

4. National Purchasing Management Survey (Selected components indexed)[b]

Component	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1985	1986	1987	1988	1989	1989 I	1989 II	1989 III	1989 IV	1990 I
4. New orders	91	105	112	123	118	100	108	103	92	96	100
5. Change in inventories	83	88	89	97	99	91	96	92	89	86	84
6. Vendor performance	81	96	101	91	85	105	93	101	111	115	108
7. Changes in material prices	147	91	103	143	154	106	134	114	90	87	92

SOURCES: Average weekly hours and initial claims based on information from Michigan Employment Security Commission; number of housing units put under contract, F.W. Dodge Division, McGraw Hill Information Systems Company; survey data from the National Association of Purchasing Management. Seasonal adjustment by the Institute.

a. Not available.

b. Survey results shown here are based on percent reporting conditions favorable to economic growth minus percent reporting conditions unfavorable to economic growth plus 100.

Table A-4
Employment Data for West Michigan MSAs and Michigan
(Thousands of jobs - by place of work)

Total Employment[a]

Labor market area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1985	1986	1987	1988	1989	1989 I	1989 II	1989 III	1989 IV	1990 I
Battle Creek MSA	55.2	54.2	55.0	56.1	58.2	59.3	59.2	59.5	59.2	59.3	60.3
Benton Harbor MSA	60.8	59.0	62.0	63.3	64.9	66.7	66.4	67.1	66.8	66.5	66.6
Grand Rapids MSA	266.1	293.4	300.3	306.0	324.1	340.0	335.4	339.2	342.2	343.2	347.1
Kalamazoo MSA	95.6	97.2	101.3	103.7	106.6	110.7	109.7	110.6	110.8	111.7	111.4
Muskegon MSA	56.4	55.2	56.2	56.0	57.0	57.8	57.5	57.8	57.7	58.0	59.0
West Michigan, 5 MSAs	534.1	559.1	574.7	585.1	610.6	634.5	628.7	633.9	636.6	638.6	644.9
Michigan	3,442.8	3,505.3	3,639.3	3,691.0	3,757.5	3,860.5	3,841.6	3,861.6	3,868.7	3,870.2	3,877.6

Private Manufacturing Employment

Labor market area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1985	1986	1987	1988	1989	1989 I	1989 II	1989 III	1989 IV	1990 I
Battle Creek MSA	18.0	14.9	15.0	15.5	15.3	15.2	15.6	15.5	16.6	16.5	16.4
Benton Harbor MSA	21.5	20.5	21.5	21.3	21.2	22.1	22.3	22.4	21.6	21.0	20.7
Grand Rapids MSA	89.0	99.0	94.5	94.1	98.3	100.0	99.6	100.0	102.4	102.3	100.9
Kalamazoo MSA	28.5	29.1	29.2	29.1	30.1	30.2	30.4	30.3	30.6	30.4	29.8
Muskegon MSA	19.7	19.4	18.1	17.7	17.3	16.3	16.6	16.4	16.9	17.0	17.0
West Michigan, 5 MSAs	176.7	182.8	178.3	177.8	182.2	183.9	184.5	184.6	188.1	187.3	185.0
Michigan	998.9	984.3	998.2	966.4	934.2	943.1	950.8	949.3	966.6	955.6	923.6

Private Nonmanufacturing Employment

Labor market area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1985	1986	1987	1988	1989	1989 I	1989 II	1989 III	1989 IV	1990 I
Battle Creek MSA	27.2	27.9	28.6	29.1	31.3	32.2	31.7	32.0	31.7	32.1	32.3
Benton Harbor MSA	30.4	30.5	32.1	33.5	35.0	35.9	35.4	36.0	36.5	36.7	37.2
Grand Rapids MSA	144.5	165.0	175.2	180.7	193.3	207.4	203.4	206.5	210.1	210.9	211.9
Kalamazoo MSA	50.3	52.6	56.1	58.0	59.1	63.0	61.8	62.7	63.7	64.5	64.0
Muskegon MSA	27.3	28.3	29.3	29.7	30.5	32.2	31.7	32.2	32.1	32.5	32.2
West Michigan, 5 MSAs	279.7	304.2	321.3	330.8	349.2	370.6	364.5	369.3	373.9	376.7	377.9
Michigan	1,816.1	1,941.3	2,044.5	2,114.0	2,192.7	2,286.1	2,260.0	2,280.3	2,325.2	2,328.9	2,320.9

Government Employment

Labor market area	Annual averages (Selected years)						By quarter (Adjusted for seasonal variations)				
	1980	1985	1986	1987	1988	1989	1989 I	1989 II	1989 III	1989 IV	1990 I
Battle Creek MSA	10.1	11.5	11.4	11.5	11.5	11.9	11.9	12.0	11.2	11.6	11.6
Benton Harbor MSA	9.0	8.1	8.5	8.5	8.6	8.7	8.7	8.8	8.6	8.7	8.7
Grand Rapids MSA	32.3	29.4	30.6	31.1	31.7	32.7	32.4	32.7	32.4	34.4	34.3
Kalamazoo MSA	16.8	15.6	16.0	16.5	17.3	17.5	17.5	17.7	17.3	17.7	17.6
Muskegon MSA	9.4	7.6	8.7	8.8	9.1	9.2	9.2	9.2	9.5	9.8	9.8
West Michigan, 5 MSAs	77.6	72.1	75.1	76.3	78.2	80.1	79.7	80.2	79.0	82.1	82.0
Michigan	627.8	579.8	596.6	606.0	624.5	632.6	630.8	634.4	623.8	633.0	633.1

SOURCE: Michigan Employment Security Commission. Seasonal adjustments by the Institute.

a. Detail may not add to totals because of rounding.

Table A-5
Vacancy Rates for Selected Metropolitan Statistical Areas (MSAs) in Michigan

MSA	End date of survey	All types	Single family	Single family attached	Multi-family	Mobile home
	Total existing housing units					
Ann Arbor	03/07/90	3.6	1.3	4.6	6.8	1.5
Battle Creek	10/14/88	3.8	2.5	9.3	8.8	8.1
Benton Harbor	04/06/89	3.1	2.3	4.1	6.0	5.0
Detroit	12/01/88	2.5	1.6	3.9	5.3	1.6
Flint	03/16/89	3.4	2.7	4.6	6.3	4.4
Grand Rapids	03/25/89	2.6	1.5	3.9	6.0	1.9
Jackson	05/11/89	2.7	1.9	3.4	6.7	0.8
Kalamazoo	03/16/89	3.7	2.3	5.2	6.5	6.1
Lansing	10/27/88	2.9	2.3	3.7	4.3	2.8
Muskegon	06/01/89	2.6	2.0	15.9	3.9	1.1
Saginaw-Bay City-Midland	09/23/89	2.3	1.8	4.5	4.2	2.9
	Existing housing units plus units under construction					
Ann Arbor	03/07/90	4.2	1.6	6.5	7.7	n.a.
Battle Creek	10/14/88	4.0	2.6	9.3	9.6	n.a.
Benton Harbor	04/06/89	3.4	2.7	4.1	6.3	n.a.
Detroit	12/01/88	3.2	2.1	5.7	6.8	n.a.
Flint	03/16/89	3.7	2.8	6.0	7.1	n.a.
Grand Rapids	03/25/89	3.4	2.0	5.2	7.9	n.a.
Jackson	05/11/89	3.1	2.0	11.0	6.7	n.a.
Kalamazoo	03/16/89	5.2	2.6	10.7	10.8	n.a.
Lansing	10/27/88	3.3	2.6	4.1	5.3	n.a.
Muskegon	06/01/89	2.9	2.3	17.0	3.9	n.a.
Saginaw-Bay City-Midland	09/23/89	2.5	2.0	5.1	4.3	n.a.

SOURCE: Federal Home Loan Bank of Indianapolis.

NOTE: Vacancy rates for United States are not strictly comparable. In 1989 vacancy rates published by U.S. Department of Commerce show rental housing vacancy rates for the first, second, third, and fourth quarters of 1989 at 7.2, 7.1, 7.2 and 6.8 percent. Homeowner housing vacancy rates for the same periods were 1.5, 1.5, 1.8 and 1.6 percent.

Table A-6
Population by Sex and Age
Michigan and Five Metropolitan Areas in West Michigan

Area		Males	Females	0–14	15–19	20–34	35–64	Over 64
		Percent Distribution						
Michigan	1985	48.8	51.2	22.6	8.5	26.4	31.9	10.6
	1980	48.8	51.2	24.0	9.7	26.0	30.5	9.8
Metropolitan (MSAs):								
Battle Creek	1985	48.5	51.5	22.6	7.9	24.5	33.1	11.9
	1980	48.5	51.5	23.3	9.4	24.0	32.0	11.3
Benton Harbor	1985	47.9	52.1	23.4	8.3	23.7	32.6	12.0
	1980	48.3	51.7	24.8	9.6	23.7	31.0	10.9
Grand Rapids	1985	48.6	51.4	23.9	8.2	28.2	29.9	9.8
	1980	48.5	51.5	24.4	10.1	27.0	28.7	9.8
Kalamazoo	1985	48.8	51.2	21.2	8.9	31.0	29.9	9.0
	1980	48.4	51.6	21.6	10.5	30.6	28.4	8.9
Muskegon	1985	48.5	51.5	23.7	8.2	25.3	31.2	11.6
	1980	48.4	51.6	24.5	10.0	24.3	30.5	10.7

SOURCE: Michigan Department of Management and Budget, Office of Revenue and Tax Analysis.

Table A-7
Average Residential Contract Mortgage Rates in Michigan

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
1984.....	14.11	13.77	13.79	14.10	14.37	15.02	15.15	14.99	14.84	14.75	14.25	14.19
1985.....	14.05	13.77	13.88	13.84	13.73	12.94	12.72	12.80	12.66	12.69	12.58	12.13
1986.....	11.46	11.46	10.92	10.81	10.79	11.19	11.24	11.12	10.90	10.84	10.73	10.49
1987.....	10.25	9.97	9.92	10.06	11.04	11.36	11.01	10.83	11.18	11.50	11.20	11.10
1988.....	11.05	10.52	10.45	10.53	10.73	10.99	10.87	10.97	11.06	10.94	10.70	10.89
1989.....	11.30	11.14	11.35	11.68	11.48	10.92	10.56	10.42	10.62	10.50	10.35	10.29
1990.....	10.27	10.63	10.70									

SOURCE: Business Information Division, Federal Home Loan Bank of Indianapolis.

NOTE: The contract rate shown is for 75 percent loan-to-value ratio, 25-year maturity loans on new single family homes. Alternative plans that allow mortgage rates to be adjusted, varied, blended, or shared can be arranged at lower rates..

Table A-8
Consumer Price Index

Year	Annual Avg.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Consumer Price Index (CPI), U.S. City Average (1982-84=100)													
CPI for All Urban Consumers (CPI-U)													
1984	103.9	101.9	102.4	102.6	103.1	103.4	103.7	104.1	104.5	105.0	105.3	105.3	105.3
1985	107.6	105.5	106.0	106.4	106.9	107.3	107.6	107.8	108.0	108.3	108.7	109.0	109.3
1986	109.6	109.6	109.3	108.8	108.6	108.9	109.5	109.5	109.7	110.2	110.3	110.4	110.5
1987	113.6	111.2	111.6	112.1	112.7	113.1	113.5	113.8	114.4	115.0	115.3	115.4	115.4
1988	118.3	115.7	116.0	116.5	117.1	117.5	118.0	118.5	119.0	119.8	120.2	120.3	120.5
1989	124.0	121.1	121.6	122.3	123.1	123.8	124.1	124.4	124.6	125.0	125.6	125.9	126.1
1990	...	127.4	128.0	128.7	...	...	...	...	...	...	...	...	...
CPI for Urban Wage Earners and Clerical Workers (CPI-W)													
	1984	103.3	101.6	101.8	101.8	102.1	102.5	103.0	103.2	104.2	104.8	104.8	104.7
1985	106.9	104.9	105.4	105.9	106.3	106.7	107.0	107.1	107.3	107.6	107.9	108.3	108.6
1986	108.6	108.9	108.5	107.9	107.6	107.9	108.4	108.4	108.6	109.1	109.1	109.2	109.3
1987	112.5	110.0	110.5	111.0	111.6	111.9	112.4	112.7	113.3	113.8	114.1	114.3	114.2
1988	117.0	114.5	114.7	115.1	115.7	116.2	116.7	117.2	117.7	118.5	118.9	119.0	119.2
1989	122.6	119.7	120.2	120.8	121.8	122.5	122.8	123.2	123.2	123.6	124.2	124.4	124.6
1990	...	125.9	126.4	127.1	...	...	...	...	...	...	...	...	...

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor.

NOTES: Monthly data are shown above unadjusted for seasonal variations. Unadjusted CPI data are used extensively for escalation purposes. Although the CPI is often called the "Cost-of-Living Index," it measures only price change, which is just one of several important factors affecting living costs. All CPI series are linked historically to the original CPI Index for Urban Wage Earners and Clerical Workers.

These series contain no revision but are reprinted for the convenience of the user.

PERCENT CHANGE: Movements of these indexes from one time period to another are usually expressed as percent changes rather than changes in index points. Index point changes are affected by the level of the index in relation to its base period while percent changes are not. Examples of computation follow:

$$\frac{100 \times 108.6 \text{ (1986 annual avg.)} - 106.9 \text{ (1985 annual avg.)}}{106.9 \text{ (1985 annual avg.)}} = 1.6\% \text{ change 1985 to 1986, CPI-W.}$$

$$\frac{100 \times 109.3 \text{ (1986 December)} - 108.6 \text{ (1985 December)}}{108.6 \text{ (1985 December)}} = 0.6\% \text{ change December 1985 to December 1986, CPI-W.}$$

$$\frac{100 \times 110.0 \text{ (1987 January)} - 109.3 \text{ (1986 December)}}{109.3 \text{ (1986 December)}} = 0.6\% \text{ change December 1986 CPI-W to January 1987, CPI-W.}$$

Table A-9
Selected Labor Market Indicators
(Not adjusted for seasonal variations)

Area	Average for manufacturing production workers[a] March 1990			Civilian labor force unemployment rate[b]	
	Weekly hours	Hourly earnings	Weekly earnings	December 1989	March 1990
United States	40.6	$10.73	$435.6	5.1	5.4
Michigan	41.9	13.73	575.3	7.2	7.6
West Michigan MSAs:					
Battle Creek	42.4	14.22	602.9	8.0	8.3
Benton Harbor	44.0	9.81	431.6	7.6	7.8
Grand Rapids	40.3	11.86	478.0	5.9	5.9
Kalamazoo	40.2	14.04	564.4	5.1	5.6
Muskegon	41.2	12.30	506.8	9.1	9.5
Other MSAs:					
Ann Arbor	44.3	14.82	656.5	4.3	4.4
Detroit	43.0	14.77	635.1	7.0	7.3
Flint	41.5	17.51	726.7	8.5	8.9
Jackson	41.2	10.80	445.0	7.1	8.0
Lansing-E. Lansing	38.3	15.43	591.0	5.7	5.5
Saginaw-Bay City-Midland	43.3	15.72	680.7	7.0	7.7
Other Areas:					
Upper Peninsula	41.1	10.43	428.7	8.8	10.8

SOURCES: U.S. Department of Labor and the Michigan Employment Security Commission (MESC) (most recent benchmark).

a. Preliminary. Earnings include overtime and part-time wages.

b. Seasonally adjusted rate for U.S. was 5.3 percent in December 1989 and 5.2 percent in March 1990. Seasonally adjusted rate for Michigan was 7.2 percent in December 1989 and 7.2 percent in March 1990.

Table A-10
Commercial Banking Data
Fourth Quarter 1989
(In thousands of current dollars)

	Metropolitan (MSAs)[a]				
	Battle Creek	Benton Harbor	Grand Rapids	Kalamazoo	Muskegon
Total deposits	$176,390	$1,129,646	$5,883,477	$2,083,808	$871,623
Total transaction accounts[b]	55,774	281,091	1,364,411	589,776	211,564
Nontransaction savings[c]	59,077	255,116	1,352,458	618,705	255,731
Time deposits < $100,000	52,134	461,484	2,027,074	680,849	340,345
Time deposits > $100,000[d]	9,405	131,955	1,139,534	117,297	63,983
Total assets	196,548	1,247,143	7,095,870	2,435,598	972,612
Total loans	71,268	796,241	4,707,864	1,536,279	532,237
Agriculture	498	11,481	48,985	25,468	1,759
Business	16,429	188,203	1,651,199	323,099	113,184
Consumer	7,710	162,613	997,517	365,861	115,281
Government	768	16,331	136,388	111,890	19,249
Real estate	45,175	414,073	1,801,107	691,492	277,877
Other[e]	688	3,540	72,668	18,469	4,887

SOURCE: Federal Reserve Bank of Chicago.

a. Reported data includes deposits and assets in all branches of banks with home offices in the five metropolitan statistical areas (MSAs).

b. Total transaction accounts include demand deposits, automated teller accounts, and NOW accounts.

c. Nontransaction savings include money market depository accounts (MMDA) and IRAs.

d. This category includes both time certificates and open-time certificates over $100,000.

e. Includes loans made to depository institutions, leases, and bankers acceptances, and unearned income.

Table A-11
Population and Income Update for Selected Areas

Area	Population				Per Capita Income			
	1988[a]	1980	Change	% change	1987	1979	% change current dollars	% change constant dollars
Michigan	9,240,000	9,262,078	(22,078)	-0.2	11,973	7,688	55.7	3.5
West Michigan	1,733,000	1,646,402	86,598	5.3	11,043	7,072	56.1	3.8
Metropolitan (MSAs)								
6-county total	1,350,200	1,284,480	65,720	5.1	11,366	7,240	57.0	4.4
Battle Creek MSA	139,200	141,557	(2,357)	-1.7	10,827	7,211	50.1	-0.2
Benton Harbor MSA	166,600	171,276	(4,676)	-2.7	10,455	6,728	55.4	3.3
Kalamazoo MSA	217,900	212,378	5,522	2.6	12,367	7,769	59.2	5.8
Grand Rapids MSA	665,200	601,680	63,520	10.6	11,771	7,437	58.3	5.2
Kent County	484,600	444,506	40,094	9.0	11,883	7,522	58.0	5.0
Ottawa County	180,600	157,174	23,426	14.9	11,471	7,198	59.4	6.0
Muskegon MSA	161,300	157,589	3,711	2.4	9,752	6,358	53.4	2.0
Nonmetropolitan								
7-county total	382,800	361,922	20,878	5.8	9,901	6,476	52.9	1.7
Allegan	90,200	81,555	8,645	10.6	10,440	6,744	54.8	2.9
Barry	49,600	45,781	3,819	8.3	10,708	6,965	53.7	2.2
Branch	40,700	40,188	512	1.3	9,502	6,449	47.3	-2.0
Cass	49,500	49,499	1	0.0	9,887	6,481	52.6	1.4
Oceana	23,400	22,002	1,398	6.4	8,433	5,627	49.9	-0.4
St. Joseph	60,000	56,083	3,917	7.0	9,887	6,473	52.7	1.6
Van Buren	69,400	66,814	2,586	3.9	9,377	6,108	53.5	2.1

SOURCES: State of Michigan Department of Management and Budget and U.S. Bureau of the Census, 1988 County Estimates.

NOTE: Battle Creek MSA is Calhoun County; Benton Harbor MSA is Berrien County; Kalamazoo MSA is Kalamazoo County; and Muskegon MSA is Muskegon County.

a. 1988 population figures are estimates.

Table A-12
Existing Home Sales

	Number of sales first quarter			Average sales price first quarter		
	1990	1989	Percent change	1990	1989	Percent change
Battle Creek Area	280	268	4.5	$54,468	$51,345	6.1
Berrien County Area	410	477	-14.0	71,577	66,370	7.9
Grand Rapids Area	1,904	1,738	9.6	75,079	72,630	3.4
Holland Area	282	262	7.6	82,110	80,257	2.3
Kalamazoo Area	1,038	1,047	-0.9	69,215	65,595	5.5
Muskegon Area*	225	n.a.	n.a.	58,923	n.a.	n.a.

SOURCE: Michigan Association of Realtors and the Muskegon Board of Realtors.

*January and March only.

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